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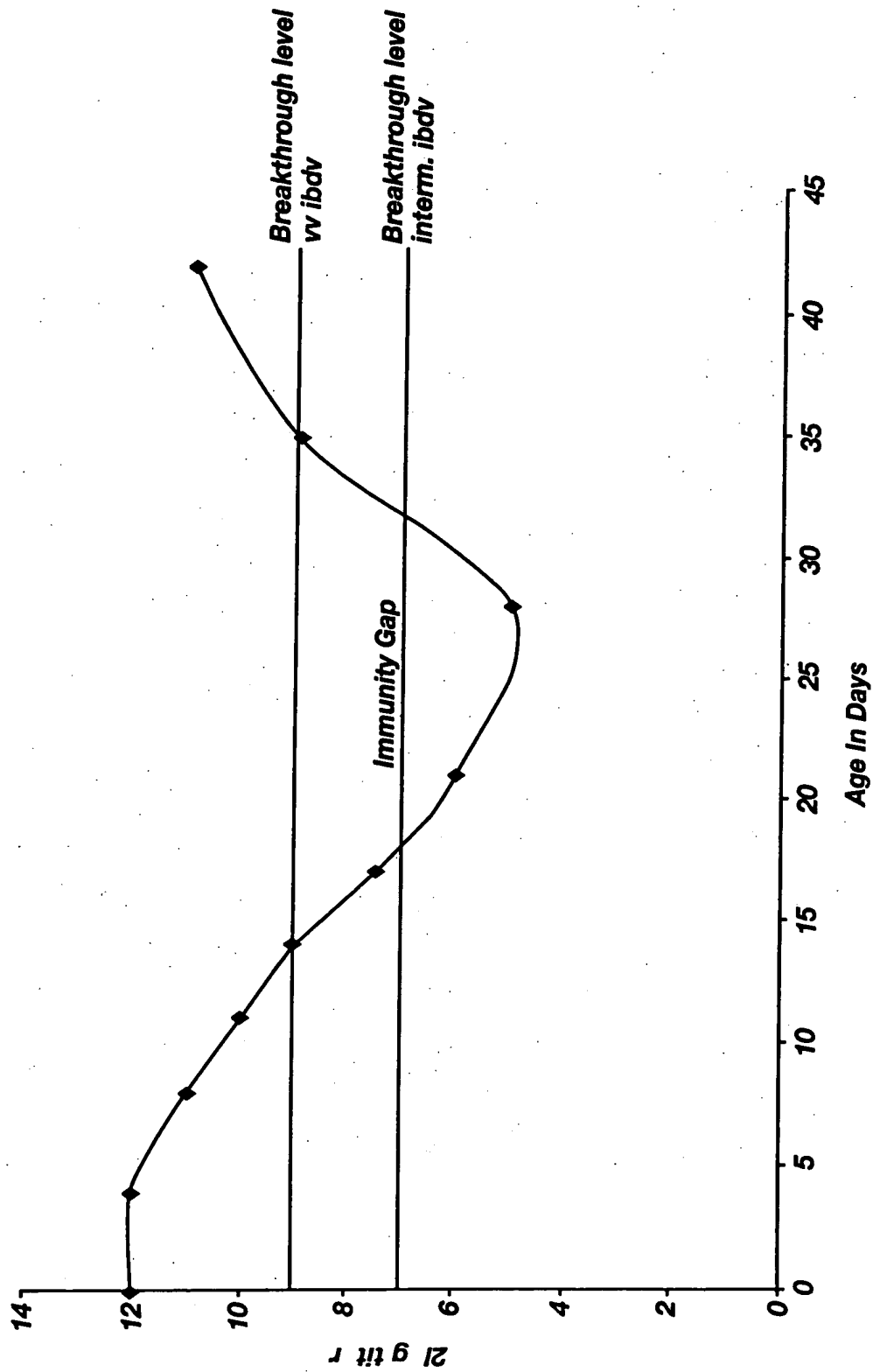


FIG. 1

CONSENSUS:	ggatacagtc	ggtctgacc	cgggggagtc	acccggggac	aggygwwca	ggycctgttc	60
CEF94-A:	.....	.....	.....	.....	...C.t...	..t.....	60
D6948-A:	.....	.....	.....	.....	...t.a...	..C.....	60
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	caggatgga	ctcctccttc	tacaaygcta	tcattgatgg	tyagtagaga	tcagacaaac	120
CEF94-A:	.....	.....	...C.....	.....	..C.....	.....	120
D6948-A:	.....	.....	...t.....	.....	..t.....	.....	120
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	gatcgcagcg	atgacraacc	tgcaagatca	aaccaaacag	attgttcctg	tcatacggag	180
CEF94-A:	.....	...a.....	.....	.....	.....	.....	180
D6948-A:	.....	...g.....	.....	.....	.....	.....	180
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	ccttctgatg	ccaacaaccg	gaccggcgctc	cattccggac	gacaccctrg	agaagcacac	240
CEF94-A:	.....	.....	.....	.....	.....g.	.....	240
D6948-A:	.....	.....	.....	.....	...a.	.....	240
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tctcagggtca	gagacctcga	cctacaattt	gactgtgggg	gacacagggt	cagggctaata	300
CEF94-A:	.....	.....	.....	.....	.....	.....	300
D6948-A:	.....	.....	.....	.....	.....	.....	300
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tgtcttttttc	cctggwttcc	ctgggtcaat	tgtgggtgct	cactacacac	tgcagagcaa	360
CEF94-A:	.....	...a.....	.....	.....	.....	.....	360
D6948-A:	.....	...t.....	.....	.....	.....	.....	360
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tgggaaactac	aagttcgatc	agatgctcct	gactgcccag	aacctaccgg	ccagytacaa	420
CEF94-A:	.....	.....	.....	.....	.....t.	....t....	420
D6948-A:	.....	.....	.....	.....	.....C.	....C....	420
TY89-A:	-----	-----	-----	-----	-----	-----	

REPLACEMENT SHEET

FIG. 2B

[illegible]

CONSENSUS:	cgaggtagtc	gcgaatctrt	tycaggtgcc	ccagaatccy	gtagtcgacg	ggattcttgc	1740
CEF94-A:	.....	.....a.	C.....	.....C	.....	.....t..	1740
D6948-A:	.....	.....g.	t.....	.....t	.....	.....C..	1740
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	ttcacctggg	rtactccgg	gygcacacaa	cctcgactgc	gtgttragag	agggtgccac	1800
CEF94-A:	.....	g.....	t.....	.....	.....a..	.....	1800
D6948-A:	.....	a.....	C.....	.....	.....g..	.....	1800
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	gctattccct	gtggyatya	cgacagtga	agaygccatg	acacccaaag	caytgaacag	1860
CEF94-A:	.....	.....t.t.	.....	...C....	.....	...t.....	1860
D6948-A:	.....	...C.C.	.....	...t....	.....	...C.....	1860
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	caaaatgttt	gctgtcattg	aaggcgtgcg	agaagayctc	caacctccwt	ctcaaaagagg	1920
CEF94-A:	.....	.....	.....	...C....	.....t..	.....	1920
D6948-A:	.....	.....	.....	...t....	.....a.	.....	1920
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	atccttcata	cgaactctct	cyggacayag	agtctatgga	tatgctccag	atgggggtact	1980
CEF94-A:	.....	.....	t.....C..	.....	.....	.....	1980
D6948-A:	.....	.....	C.....t..	.....	.....	.....	1980
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tccactggag	actgggagag	aytacaccgt	kgtcccaata	gatgatgtct	gggacgacag	2040
CEF94-A:	.....	.....	C.....	t.....	.....	.....	2040
D6948-A:	.....	.....	t.....	g.....	.....	.....	2040
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	cattatgctg	tccaaagayc	ccatacctcc	tattgtggga	aacagyggaa	ayctagccat	2100
CEF94-A:	.....	.....t.	.....	.....	...t....	...t.....	2100
D6948-A:	.....	.....C.	.....	.....	...C....	...C.....	2100
TY89-A:	-----	-----	-----	-----	-----	-----	

FIG. 2E

CONSENSUS:	agcttacatg gatgtgttc gacccaaagt cccmatccat gtggcyatga cgggagccct	2160
CEF94-A:	.....	2160
D6948-A:	.....a.....t.....	2160
TY89-A:	.....C.....C.....	2160
CONSENSUS:	caaygcytrt ggcgagattg agaamgtrag ctttagaagc accaagctcg ccaactgcaca	2220
CEF94-A:	...t..t.g.....a.a.....	2220
D6948-A:	...C..C.a.....C.g.....	2220
TY89-A:	-----	2220
CONSENSUS:	ccgacttggc ctyaagtgg ctggtcccgg wgcattygay gtraaacacg ggyccaactg	2280
CEF94-A:	.....t.....a.....C.t..a.....	2280
D6948-A:	.....C.....t.....t.....C..g.....	2280
TY89-A:	-----	2280
CONSENSUS:	ggcracgtty atcaaacgtt tycctcaciaa tccmcgmga c tgggacaggy tmccytacct	2340
CEF94-A:	...a.....C.....C.....	2340
D6948-A:	...g.....t.....t.....a.C.....C..C.t.....	2340
TY89-A:	-----	44
CONSENSUS:	caacctwccm tayctyccac cmamwgcwgg acgycagtwc sayctkgccm tggchgchtc	2400
CEF94-A:	.....a.a..C..t.....C.at..a.....C...a..C..t...a.....	2400
D6948-A:	.....t..a..C..t.....C.at..a.....C...a..g..C..t...a.....	2400
TY89-A:	.....t..C..t..C.....a.ca..t.....t.....t..C..t..g...C...a..C...104	104
CONSENSUS:	mgagttcaaa gagaccocmg aactcgarr ygcygtsmgw gcmatggamg cwgcwgcmaa	2460
CEF94-A:	a.....C.....C.....gag t..C..ca.a..a.....a..a..a..C...2460	2460
D6948-A:	a.....C.....C.....gag C..C..ca.a..C.....a..a..a..C...2460	2460
TY89-A:	C.....a.....a.....aga C..t..gc.t..a.....C..t..t..a...164	164
CONSENSUS:	cgtsagacca ytrttccrmt cwgcdctcmr bgtsttcattg tgggtggaag araayggat	2520
CEF94-A:	...g.....C.a.....aa..t..a...ag t..g.....C.....g..t.....2520	2520
D6948-A:	...g.....C.g.....aa..t..g...ag C..g.....C.....g..t.....2520	2520
TY89-A:	...C.....t.g....gc..a..t...ca g..C.....t.....a..C.....224	224

FIG. 2F

CONSENSUS:	tgtracygay atggcyaaact tcgcmctcag cgaccggaac gcmcaymgga tgmrraat	2580
CEF94-A:	...g.t.t.c ...c... ..a... ..c.tc... ..cga....	2580
D6948-A:	...g.t.t.t ...c... ..a... ..c.tc... ..cgc....	2580
TY89-A:	...a.c.c.c ...t... ..c... ..a.ca... ..aaa....	284
CONSENSUS:	ythgcaaay gcwccmarg cmgmgagcaa gtcgcaragr gccaaagtayg gsacrgcwgg	2640
CEF94-A:	t..t.....c ..a.a.a.. a..c... ..a..a..g ..c... ..g.a.a..	2640
D6948-A:	t..c.....c ..a.a.a.. a..c... ..a..a..a ..c... ..g.a.a..	2640
TY89-A:	c.a.....t ..t.c..g. .c.a... ..g..g..g ..t... ..c.g.t..	344
CONSENSUS:	ctacggagtg gaggcymgrg gccccacdcc agargargca cagagggara aagacacacg	2700
CEF94-A:	.....tc.g. ....a.. ..g.a.. ..a... ..a... ..a... ..a...	2700
D6948-A:	.....cc.g. ....t.. ..g.a.. ..a... ..a... ..a... ..a...	2700
TY89-A:	.....ta.a. ....g.. ..a.g.. ..a... ..g... ..g... ..g...	404
CONSENSUS:	gatctcmaag aagatggara cbatgggcat ctacttygca acaccrgaat gggtagcact	2760
CEF94-A:	.....a... ..g... ..g... ..t... ..a... ..a... ..a... ..a...	2760
D6948-A:	.....a... ..g... ..g... ..t... ..a... ..a... ..a... ..a...	2760
TY89-A:	.....c... ..a... ..g... ..c... ..g... ..g... ..a... ..a...	464
CONSENSUS:	caayggggcac cgrggsgccaa gccccggcca gctvaagtac tggcaraaca camgagaaat	2820
CEF94-A:	...t.....a.g... ..g... ..a... ..g... ..c... ..c... ..c...	2820
D6948-A:	...t.....g.g... ..g... ..g... ..g... ..c... ..c... ..c...	2820
TY89-A:	...c.....a.c... ..c... ..c... ..a... ..a... ..a... ..a...	524
CONSENSUS:	accdgahccm aacgaggact aycyagacta ygtgcaygcr gagaagagcc ggttggrtc	2880
CEF94-A:	...g.c.c.a .....t.t....c.....t.a .....a... ..a... ..a...	2880
D6948-A:	...t.t.a .....c.t....c.....t.a .....a... ..a... ..a...	2880
TY89-A:	...a.a.c .....c.c....t.....c.g .....g... ..g... ..g...	584
CONSENSUS:	agaagaacar rtcytaaggg cagcyacgtc gatctacggg gctccaggac aggcwgarcc	2940
CEF94-A:	.....a a..c.....t.... ..a... ..a... ..a... ..a... ..a...	2940
D6948-A:	.....a a..c.....t.... ..a... ..a... ..a... ..a... ..a...	2940
TY89-A:	.....g g..t.....c.... ..a... ..a... ..a... ..a... ..a...	644

FIG. 2G

```

CONSENSUS: accccaagcy ttcatagacg aagtygccar rgtctatgaa atcaaccatg grcgtggycc 3000
CEF94-A:   .....t .....t....a a .....a .....a .....C.. 3000
D6948-A:   .....C .....C....a a .....C....a .....g.....C.. 3000
TY89-A:   .....C .....C .....C....g g .....g .....g.....t.. 704

CONSENSUS: maaccargar cagatgaarg aytgctctct gactgcgatg gagatgaagc atcgcaatcc 3060
CEF94-A:   a.....a.a .....a. .t.....t. ......... 3060
D6948-A:   C.....a.a .....a. .t.....C. ......... 3060
TY89-A:   a.....g.g .....g. .C.....C. ......... 764

CONSENSUS: caggcgggct cyaccaaagc cmaagccaaa acccaatgct ccawcacaga gacccctgg 3120
CEF94-A:   .....t .....C.....C.....a .....a ..... 3120
D6948-A:   .....C .....C.....C.....a .....a ..... 3120
TY89-A:   .....C .....C.....a .....t.....t..... 824

CONSENSUS: wcggtgggc cgctggatca ggrcbgtctc tgaygaggac ytkgagtgag gywcctggga 3180
CEF94-A:   t.....t .....a.C.....t.....C.t.....ta..... 3180
D6948-A:   t.....t .....g.t.....t.....C.t.....ct..... 3180
TY89-A:   a.....t .....a.g.....C.....t.g.....ct..... 884

CONSENSUS: gtctcccgc accaccgcg caggygtgga caccaattmr kmmhtaswrm atycsaaatt 3240
CEF94-A:   .....t .....t.....t.....Cg gact..caac ..C.C..... 3240
D6948-A:   .....t .....C.....C.....cg gcca..caac ..C.C..... 3240
TY89-A:   .....t .....t.....t.....aa tcac..gtga ..t.g..... 944

CONSENSUS: ggatccgttc gcgggtcccc 3260
CEF94-A:   .....t .....t.....t.....t.....t..... 3260
D6948-A:   .....t .....t.....t.....t.....t..... 3260
TY89-A:   .....t .....t.....t.....t.....t..... 964
```

FIG. 3A

CONSENSUS: ggatacgatg ggtctgaccc tctgggagtc acgaattaac gtggctacta ggggygatrm 60
CEF94-B:C...aa 60
D6948-B:t...gc 60

CONSENSUS: ccrcgcgtrg ctgccacggtt agtggctcct cttcttgatg attctccac catgagtgc 120
CEF94-B: ..g.....g.....g..... 120
D6948-B: ..a.....a.....a..... 120

CONSENSUS: rttttcaaya gtccacaggc gcgaagcamg atmtcagcag cgttcggcat aaagcctacw 180
CEF94-B: a.....C.....C.....t 180
D6948-B: g.....t.....a.....a 180

CONSENSUS: gctggacarg aytggaaga actcytgatc cctaargtyt gggtgccacc tgaggatccs 240
CEF94-B:a..C.....t.....a..t.....g 240
D6948-B:g..t.....C.....g..C.....c 240

CONSENSUS: ytkgccagcc ctagtcgwct ggcmaagtgc ctcagrgrara acggctacaa rrttytgacg 300
CEF94-B: c.t.....a.....a.....a..g.....ag..t..... 300
D6948-B: t.g.....t.....C.....g..a.....ga..c..... 300

CONSENSUS: ccacggcttc trccygagaa tgaggagtat gagaccgayc aaatactccc wgacytagcw 360
CEF94-B:g..C.....t.....C.....a...t....a 360
D6948-B:a..t.....t.....t.....t....c....t 360

CONSENSUS: tggatgmgrc agatagargg rgctgtttta aaacmacyc tatctctccc yattggagay 420
CEF94-B:C.a.....a..g.....C..t.....t.....t 420
D6948-B:a.g.....g..a.....a..C.....c.....c 420

CONSENSUS: caggagtact tcccwaarta ctaccaaca caycgcccka gcaaggaraa gcccaatgcg 480
CEF94-B:a..g.....t.....t.....g.....g..... 480
D6948-B:t.a.....a.....g.....a.....a..... 480

REPLACEMENT SHEET

FIG. 3B

CONSENSUS: taccgcgcmg ayatcgcayt actcaagcag atgatyatcy tgtttctcca ggtccmgag 540
CEF94-B:a. .C.....C.t...ca... 540
D6948-B:C. .t.....t.C...tC... 540

CONSENSUS: gccammgakr rcctwaarga tgargtmacc ctmytraccc aaacatwag rgayaargcc 600
CEF94-B:ac..gg g...a..g.. ..a..a... ..ct.g... ..a...a.. g..c..g... 600
D6948-B:ca..ta a...t..a.. ..g..C... ..ac.a... ..t...t.. a..t..a... 600

CONSENSUS: tayggragt ggcactacat gggacargcm acymgacttg tkgcyatgaa rgaggtgccc 660
CEF94-B: ..t..a....a..a .tc..... .g..C..... g.....C... 660
D6948-B: ..C..g....g..c .ca..... .t..t.... a.....t... 660

CONSENSUS: actggragaa acccaaaacaa rgatcctcta aagcttggtg acacytttga gagcatmgcs 720
CEF94-B:a....g.....t....C...g 720
D6948-B:g....a.....C.....a...c 720

CONSENSUS: cagctacttg acatcacwyt accggtaggc ccaccgggtg aggatgacaa gccctgggtr 780
CEF94-B:ac.ac.g 780
D6948-B:tt.a 780

CONSENSUS: ccactcaciaa grgtgccgtc amggatgttg gtwtgcagg gmgacgtaga tggsgamttt 840
CEF94-B:a..... .C..... .a..... .a..... .C..C... 840
D6948-B:g..... .a..... .t..... .C..... .g..a... 840

CONSENSUS: gaggttgarg aytaccttcc caaaatcaac ctcaagtcac caagtgagact rccmtatgtw 900
CEF94-B:a. .t.....a..a.....a 900
D6948-B:g. .C.....g..C.....t 900

CONSENSUS: ggtcgcacca aaggagarac wattggsgag atgatagcya tmtcraacca gtttctymga 960
CEF94-B:g.. a.....C...t. .C..a....Ca.. 960
D6948-B:a.. t.....g...C. .a..g.....tc.. 960

FIG. 3C

CONSENSUS: gagctatcar crctgytgaa gcarggtgca gggacaaarg ggtracraaa gaagaagctr 1020
CEF94-B:a a...t... ..a.....g.....g.....a.....a 1020
D6948-B:g .g...C... ..g.....a.....a.....g.....g 1020

CONSENSUS: ctacagcatgy taagtgacta ytggtactta tcatgygggc tttgtttcc maaggctgar 1080
CEF94-B:ttC.....a.....a.....a.....a 1080
D6948-B:CCtC.....C.....g 1080

CONSENSUS: aggtacgaca aaagyacatg gctcaccaag acccgkaaca tatggtcagc tccatcmcca 1140
CEF94-B:tg.....g.....C... 1140
D6948-B:Cta... 1140

CONSENSUS: acacacctca tgatctcwat gatmacctgg cccgtgatgt ccaayagccc aaayaacgtg 1200
CEF94-B:tC.....C.....t..... 1200
D6948-B:aat.....C..... 1200

CONSENSUS: ttgaacattg argggtgtcc rtcactctac aarttcaacc cgtyagagg wgggytraac 1260
CEF94-B:aaa.....a...t.g... 1260
D6948-B:ggt.....t...c.a... 1260

CONSENSUS: aggatcgtsg agtggatawt ggcycggaw gaaccaagg cyytwgtata tgckgacaac 1320
CEF94-B:CtC.....at.....g..... 1320
D6948-B:gat.....t.....a... 1320

CONSENSUS: atatacatgtg tycactcmaa cacgtggtac tcaattgacc tagagaaggg tgaggcaaac 1380
CEF94-B:CaC.....a..... 1380
D6948-B:tC.....a..... 1380

CONSENSUS: tgcackcgyc aacacatgca rgccgcmatg tactacatmc tyaccagagg rtggtcmgay 1440
CEF94-B:t..C.a.....a.....a.....a.....a..C 1440
D6948-B:g..t.g.....C... ..t.....a.....C..t 1440

CONSENSUS: aacggygacc cmatgttcaa tcaracatgg gccacctttg csatgaacat tgccccwgct 1500
CEF94-B:C.....a.....a.....C.....t... 1500
D6948-B:t.....C.....g.....g.....a... 1500

FIG. 3D

CONSENSUS:	ctagtkgtgg	actcatcrtg	yctgatwatg	aacctkcara	tyaagacmta	tggtcaaggc	1560
CEF94-B:	.....g.....	.....g.....	C.....a.....	.....g.a.....	.t.....C.....	.....	1560
D6948-B:	.....t.....	.....a.....	t.....t.....	.....t.g.....	.C.....a.....	.....	1560
CONSENSUS:	agygggaatg	cagccacstt	catcaacaac	cayctyytka	gcacsctwgt	gctwgaccag	1620
CEF94-B:	..C.....	.....g.....	.....	..C.ct.g.....	.....g.a.....	..t.....	1620
D6948-B:	..t.....	.....C.....	.....	..t.tc.t.....	.....C.t.....	..a.....	1620
CONSENSUS:	tggaacytga	tgarrcarcc	yagwccagac	agcgargagt	tcaartcaat	tgargacaag	1680
CEF94-B:	.....C.....	...ga.g.....	C.a.....	.....g.....	.....a.....	...g.....	1680
D6948-B:	.....t.....	...ag.a.....	t.t.....	.....a.....	.....g.....	...a.....	1680
CONSENSUS:	ctrnggyatca	acttyaagat	tgagaggtcc	attgatgaya	tyaggggcaa	gctsagacag	1740
CEF94-B:	..a.t.....	.....t.....	.....	.....t.....	.C.....	...g.....	1740
D6948-B:	..g.C.....	.....C.....	.....	.....C.....	.t.....	...C.....	1740
CONSENSUS:	cttgtccycc	ttgcacaacc	agggtacctg	agtggrrggg	tygaaccaga	rcaayccagc	1800
CEF94-B:	.....t.....	.....	.....	.....g.....	..t.....	a...t.....	1800
D6948-B:	.....C.....	.....	.....	.....a.....	.C.....	g...C.....	1800
CONSENSUS:	ccaactgtwg	agctkgacct	actmggrtgg	tcwgwcwacwt	acagcaaaga	tctygggac	1860
CEF94-B:	.....t.....	.....t.....	...a.g.....	..a.t.a.....	.....	...C.....	1860
D6948-B:	.....a.....	.....g.....	...C.a.....	..t.a.t.....	.....	...t.....	1860
CONSENSUS:	tatgtgccgg	tgcttgacaa	ggaacgcyta	ttttgytctg	ctgcgtatcc	caarggrgta	1920
CEF94-B:	.....	.....	.....C.....	.....t.....	.....	...g.a...	1920
D6948-B:	.....	.....	.....t.....	.....C.....	.....	...a.g...	1920
CONSENSUS:	gagaayaara	gyctcaartc	caargtyggg	atcgagcarg	catacaargt	wgtcagggtay	1980
CEF94-B:	.....C.g.....	t.....g.....	...a.C.....	.....g.....	.....g.....	a.....t	1980
D6948-B:	.....t.a.....	.C.....a.....	...g.t.....	.....a.....	.....a.....	t.....c	1980
CONSENSUS:	gaggcggtga	ggttggttagg	tggttggaac	taccactcc	tgaacaaagc	ytgcaagaay	2040
CEF94-B:	.....	.....	.....	.....	.....	C.....t	2040
D6948-B:	.....	.....	.....	.....	.....	t.....c	2040

FIG. 3E

CONSENSUS:	aaygcargy	cmgctcgcg	gcattctggag	gccaaggggt	tccrctcga	ygagttcctm	2100
CEF94-B:	.C..g.C.	.C.....	.....	.....	...a....	C.....a	2100
D6948-B:	.t...a.t.	a.....	.....	.....	...g....	t.....c	2100
CONSENSUS:	gccgagtgt	cwgagytgtc	mgagttcggw	gargcyttcg	aaggttcaa	yatcaagctg	2160
CEF94-B:	.....	.t..C...	a.....t	.g..C...	.....	t.....	2160
D6948-B:	.....	.a..t...	C.....a	.a..t...	.....	C.....	2160
CONSENSUS:	acmgtaacay	ckgagagcct	mgccgaactk	aacarccag	taccccccaa	rccyccaaat	2220
CEF94-B:	.C.....t	.t.....	a.....g	....ag....	.....	g..C.....	2220
D6948-B:	.a.....C	.g.....	C.....t	....ga....	.....	a..t.....	2220
CONSENSUS:	gtcaacagac	cagtcaacac	yggkggrctm	aaggcagtc	gcaaygcct	caagaccggy	2280
CEF94-B:	.....	.....	t..g..a..C	.....	...C....	.....t	2280
D6948-B:	.....	.....	C..t..g..a	.....	...t....	.....c	2280
CONSENSUS:	cggtagaygra	aygaagccgg	actragtgy	ctcgtctctyc	tagccacmgc	mngmagccgw	2340
CEF94-B:	....C..g.	.C.....	..g....t	.....t.	.....a..	aa.a.....t	2340
D6948-B:	....t..a.	.t.....	..a.....C	.....C..	.....C..	cc.C.....a	2340
CONSENSUS:	ctrcargayg	cagtyaaggc	caaggcagar	gccgagaaac	tccacaaagtc	yaagccmgay	2400
CEF94-B:	.g..a..t.	....t....	.....a	.....	.....	C.....a..c	2400
D6948-B:	.a..g..C.	....C....	.....g	.....	.....	t.....C..t	2400
CONSENSUS:	gaccccgatg	cagactggtt	ygaamgrtca	gaaacyctgt	cagacctkct	ggagaaaagcc	2460
CEF94-B:	.....	.....	C..a.a..	....t....	.....t..	.....	2460
D6948-B:	.....	.....	t...C.g..	....C....	.....g..	.....	2460
CONSENSUS:	gacatygcc	gcaaggctgc	ycactcagca	ctcgtggaaa	caagcgacgc	yccttgaagcr	2520
CEF94-B:	....C...	.....	C.....	.....	.....	C.....a	2520
D6948-B:	....t....	.....	t.....	.....	.....	t.....g	2520
CONSENSUS:	gtycagtcra	cytcmgtgta	cacyccmaag	taccagarg	tyaagaaccc	acagaccgcc	2580
CEF94-B:	.t.....g.	.t..C.....	....t..C...	.....a.	.C.....	.....	2580
D6948-B:	.C.....a.	.C.a.....	...C.a..	.....g.	.t.....	.....	2580

FIG. 3F

```

CONSENSUS: tccaaccccg ttgttgggct ccacctgccc gccaagagrg ccaccggtgt ccaggcmgt 2640
CEF94-B:      .....      .....      .....a. ....      .....C... 2640
D6948-B:      .....      .....      .....g. ....      .....a... 2640

CONSENSUS: cttctcggag caggracgag cagaccaatg gggatggagg cyccaacacg gtccaagaac 2700
CEF94-B:      .....      ....a..... .....      .....C..... 2700
D6948-B:      .....      ....g..... .....      .....t..... 2700

CONSENSUS: gccgtgaaa tggccaaaamg gcggcaacgc caaaargaga gccgccaaya gccatgatgg 2760
CEF94-B:      .....      .....C..... .....      .....g.... .....C. 2760
D6948-B:      .....      .....a..... .....      .....a.... .....t. 2760

CONSENSUS: gaaccactca agaagaggac actaaycca gaccccgat ccccggcctt cgcctgcggg 2820
CEF94-B:      .....      .....      .....t.... .....      ..... 2820
D6948-B:      .....      .....      .....C.... .....      ..... 2820

CONSENSUS: ggccccc
CEF94-B:      .....
D6948-B:      .....
2827
2827
2827
```

CONSENSUS:	MTNLQDQTQQ	IVPFIRSLLM	PTTGPASIPD	DTLEKHTLRS	ETSTYNLTVG	DTGSGLIVFF	60
CEF94-PP:	.....	.....	.....	.....	.....	.....	60
D6948-PP:	.....	.....	.....	.....	.....	.....	60
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	PGFPGSIVGA	HYTLQSNNGY	KFDQMLLTAQ	NLPASYNYCR	LVSRSLTVRS	STLPGGVYAL	120
CEF94-PP:	.....	.....	.....	.....	.....	.....	120
D6948-PP:	.....	.....	.....	.....	.....	.....	120
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	NGTINAVTFQ	GSLSELTQVS	YNGLMSATAN	INDKIGNVLV	GEGTVLSLP	TSYDLGYVRL	180
CEF94-PP:	.....	.....	.....	.....	.....	.....	180
D6948-PP:	.....	.....	.....	.....	.....	.....	180
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	GDPIPAIGLD	PKMVATCDSS	DRPRVYTITA	ADDYQFSSQY	Q.GGVTTITLF	SANIDAITSL	240
CEF94-PP:	.....	.....	.....	.....	.....P.....	.....	240
D6948-PP:	.....	.....	.....	.....	.....A.....	.....	240
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	S.GGELVFTQ	SV.GL.LGAT	IYLIGFDGTA	VITRAVAA.N	GLT.GTDNL.	PFN.VIPT.E	300
CEF94-PP:	V.....	H.V.....	.....	.....N.....	.....T.....L	.....L....N.	300
D6948-PP:	I.....	Q.I.....	.....	.....D.....	.....A.....M	.....I....S.	300
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	ITQPITSIKL	EIVTSKSGGQ	AGDQMSWSA.	GSLAVTIHGG	NYPGALRPVT	LVAYERVATG	360
CEF94-PP:	.....	.....	.....R.....	.....	.....	.....	360
D6948-PP:	.....	.....	.....S.....	.....	.....	.....	360
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	SVTVAGVSN	FELIPNPELA	KNLVTEYGRF	DPGAMNYTKL	ILSERDRLGI	KTVWPTREYT	420
CEF94-PP:	.....	.....	.....	.....	.....	.....	420
D6948-PP:	.....	.....	.....	.....	.....	.....	420
TY89-PP:	-----	-----	-----	-----	-----	-----	

FIG. 4B

CONSENSUS:	DFREYFMEVA	DLNSPLKLAG	AFGFKDIIRA	.RRIAPVVS	TLFPPAAPLA	HAIGEGVDYL	480
CEF94-PP:	.....	.....	.....	I.....	.....	.....	480
D6948-PP:	.....	.....	.....	L.....	.....	.....	480
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	LGDEAQAASG	TARAASGAR	AASGRIRQLT	LAADKGYEVV	ANLFQVPQNP	VVDGILASPG	540
CEF94-PP:	.....	.....	.....	.....	.....	.....	540
D6948-PP:	.....	.....	.....	.....	.....	.....	540
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	.LRGAHNLDC	VLREGATLFP	VVITTVEDAM	TPKALNSKMF	AVIEGVREDL	QPPSQRSFI	600
CEF94-PP:	V.....	.....	.....	.....	.....	.....	600
D6948-PP:	I.....	.....	.....	.....	.....	.....	600
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	RTLSGHRVYG	YAPDGVLPLE	TGRDYTEVPI	DDVWDDSIML	SKDPIPIVG	NSGNLAIAYM	660
CEF94-PP:	.....	.....	.....	.....	.....	.....	660
D6948-PP:	.....	.....	.....	.....	.....	.....	660
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	DVFRPKVPIH	VAMTGALNA.	GEIE.VSFRS	TKLATAHRLG	LKLAGPGAED	VNTG.NWATF	720
CEF94-PP:	.....	.....C.....	.....K.....	.....	.....	.....P.....	720
D6948-PP:	.....	.....Y.....	.....N.....	.....	.....	.....S.....	720
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	IKRFPHNPRD	WDRLPYINLP	YLPNAGROQ	HLAMAASEFK	ETPELES AVR	AMEAAANVDP	780
CEF94-PP:	.....	.....	.....	.....	.....	.....	780
D6948-PP:	.....	.....	.....D.....	.....	.....	.....	780
TY89-PP:	--.....	.....	.....T.....F.....	.....L.....	.....D.....	.....D.....	58
CONSENSUS:	LFQSALSVFM	WLEENGIVTD	MANFALSDPN	AHRMRNFLAN	APQAGSKSOR	AKYGTAGYGV	840
CEF94-PP:	.....	.....	.....	.....	.....	.....	840
D6948-PP:	.....	.....	.....	.....	.....	.....	840
TY89-PP:	..R...Q...	.....	.....	.....K.....	.....	.....	118

FIG. 4C

CONSENSUS: EARGTPPEA QREKDRISK KMETMGIYFA TPEWVALNGH RGPSPGOLKY WQNTREIPDP	900
CEF94-PP:	900
D6948-PP:	900
TY89-PP:	178
CONSENSUS: NEDYLDYVHA EKSRLASEEQ ILRAATSIYG APQAEPPQA FIDEVAKVYE INHGRGPNQE	960
CEF94-PP:	960
D6948-PP:	960
TY89-PP: .....P.....V.....R.....	238
CONSENSUS: QMKDLLLTAM EMKHRNPRA PPKPKPKPNA PTQRPGRGLG RWIRTVSDLE	1012
CEF94-PP: .....L.....	1012
D6948-PP: .....A.....	1012
TY89-PP: .....S.....	290

FIG. 5A

CONSENSUS: MSD.FNSPOA RS.ISAAGI KPTAGQDVEE LLIPKVWVPP EDPLASPSRL AKFLRENGYK	60
CEF94-VP1: ...I.....T.....	60
D6948-VP1: ...V.....K.....	60
CONSENSUS: .LQPRSLPEN EEYETDQILP DLAWMRQIEG AVLKPTLSLP IGDQEYFPKY YPTHRPSKEK	120
CEF94-VP1: V.....	120
D6948-VP1: I.....	120
CONSENSUS: PNAYPPDIAL LKOMIYLFLO VPEA...LKD EVTLITQNI R DKAYSGTYM GOATRLVAMK	180
CEF94-VP1: .....NEG...	180
D6948-VP1: .....TDN.....	180
CONSENSUS: EVATGRNPKNK DPLKLGTYFE SIAQLLDITL PVGPPGEDDK PWVPLTRVPS RMLVLTGDVD	240
CEF94-VP1:	240
D6948-VP1:	240
CONSENSUS: G.FEVEDYLP KINLKSSSGL PYVGRTKGET IGEMIAISNQ FLRELS.LLK QGAGTKGSNK	300
CEF94-VP1: .D.....T.....	300
D6948-VP1: .E.....A.....	300
CONSENSUS: KKLLSMLSDY WYLSGGLLFP KAERYDKSTW LTKTRNIWSA PSPTHLMISM ITWPVMSNSP	360
CEF94-VP1:	360
D6948-VP1:	360
CONSENSUS: NNVLNIEGCP SLYKENPFRG GLNRIVEWI. AP.EPKALVY ADNIYIVHSN TWYSIDLEKG	420
CEF94-VP1: .....L.E.....	420
D6948-VP1: .....M.D.....	420
CONSENSUS: EANCTROHMQ AAMYIYLTRG WSDNGDPMFN QTWATFAMNI APALVVDSSC LIMNLQIKTY	480
CEF94-VP1:	480
D6948-VP1:	480
CONSENSUS: QGSGNAATF INNHLSTLV LDQWNL.M.QP .PDSEEFKSI EDKLGINFKI ERSIDDIRGK	540
CEF94-VP1: .....R...R.....	540
D6948-VP1: .....K..S.....	540

FIG. 5B

CONSENSUS: LRQLV.LAQP GYLSGGVEPE Q.SPTVELDL LGWSATYSKD LGIYVPVLDK ERLFCSAAYP	600
CEF94-VP1: .....L.....S.....	600
D6948-VP1: .....P.....	600
CONSENSUS: KGVENKSLKS KVGIEQAYKV VRYEALRLVG GWNYPLLKA CKNNA.AARR HLEAKGFPLD	660
CEF94-VP1: .....G.....	660
D6948-VP1: .....S.....	660
CONSENSUS: EFLAEWSELS EFGEAFEGFN IKLTVT.ESL AELN.PVPPK PPNVNRPVNT GGLKAVSNAL	720
CEF94-VP1: .....S.....K.....	720
D6948-VP1: .....P.....R.....	720
CONSENSUS: KTGRYRNEAG LSGLVLILATA RSRLQDAVKA KAEAEKLHKS KPDDPDADWF ERSETLSDLL	780
CEF94-VP1: .....K.....	780
D6948-VP1: .....K.....	780
CONSENSUS: EKADIASKVA HSAIVETSDA LEAVQSTSVY TPKYPEVKNP QTASNPPVUGL HLPKAKRATGV	840
CEF94-VP1: .....K.....	840
D6948-VP1: .....K.....	840
CONSENSUS: QAALLGAGTS RPMGMEAPTR SKNAVVKMAKR RQRQKESRQ. .	881
CEF94-VP1: .....Q P	881
D6948-VP1: -	879

FIG. 6

CONSENSUS:	MVSRDQTNR	SDD.PARSNP	TDCSVHTEPS	DANNRTGVHS	GRHP.EAHSQ	VRDLDLQFDC	60
D6948-VP5:	.....	E.....	.....	.....	R.....	.....	60
CEF94-VP5:	.....	K.....	.....	.....	G.....	.....	60
CONSENSUS:	GHRVRANCL	FPW.PWLNCG	CSLHTAEQWE	LQVRSDAPDC	PEPTGQLQLL	QASESESHSE	120
D6948-VP5:	.....	F.....	.....	.....	.....	.....	120
CEF94-VP5:	.....	I.....	.....	.....	.....	.....	120
CONSENSUS:	VKHT.WWRLC	TK.HHKRRDL	PRKPE				145
D6948-VP5:	....P.....	..W.....	.....				145
CEF94-VP5:	....S.....	..R.....	.....				145

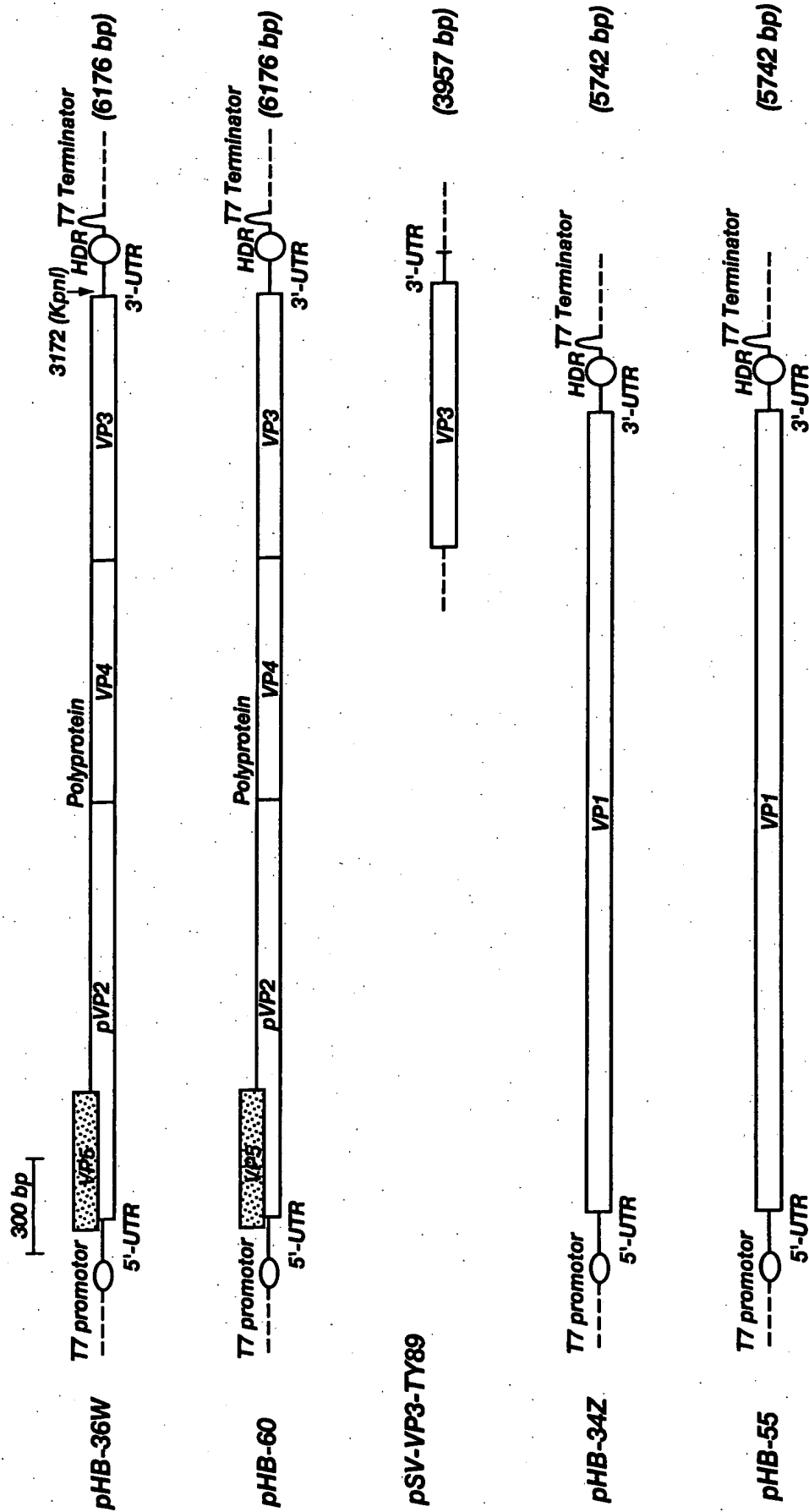


FIG. 7

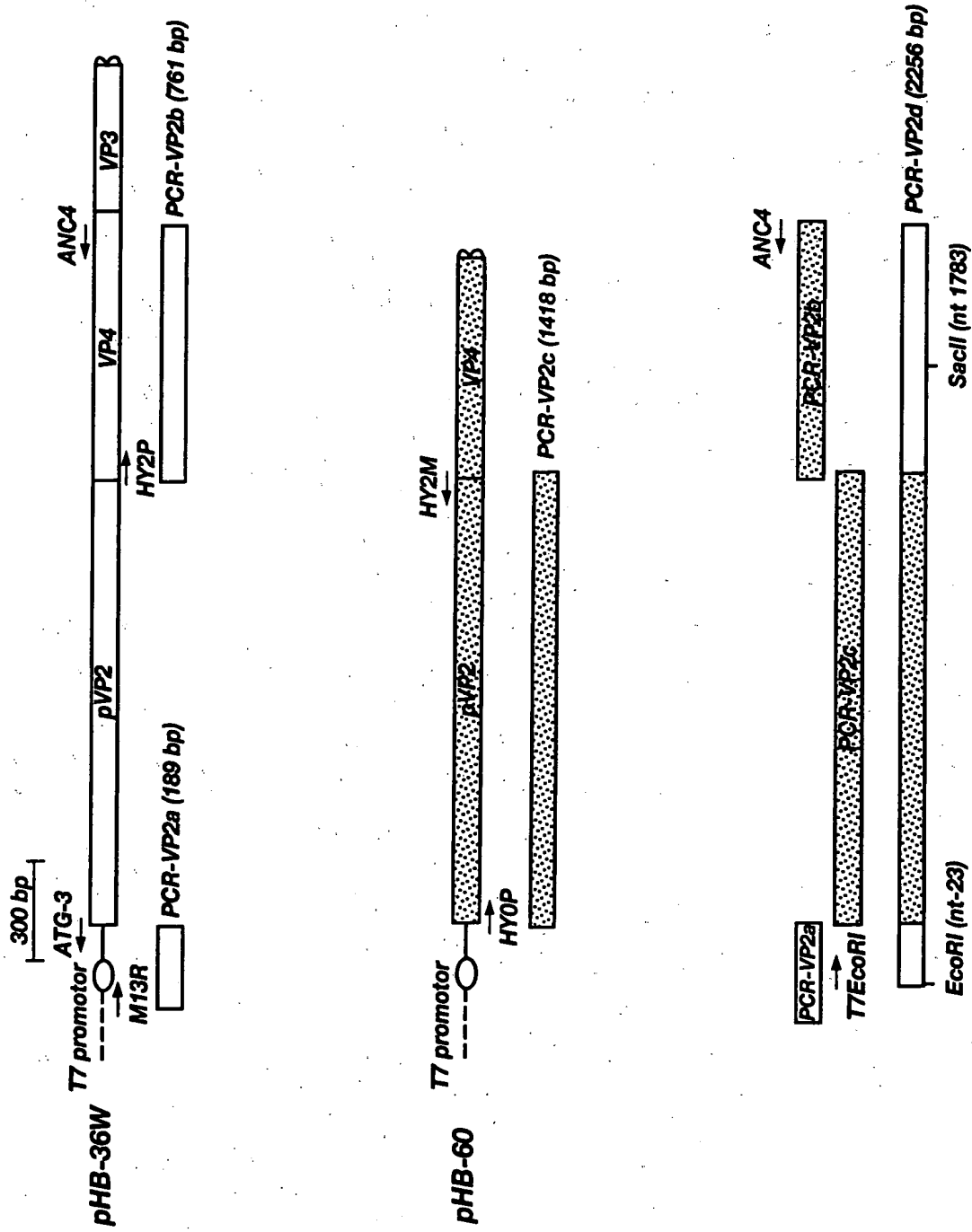


FIG. 8A

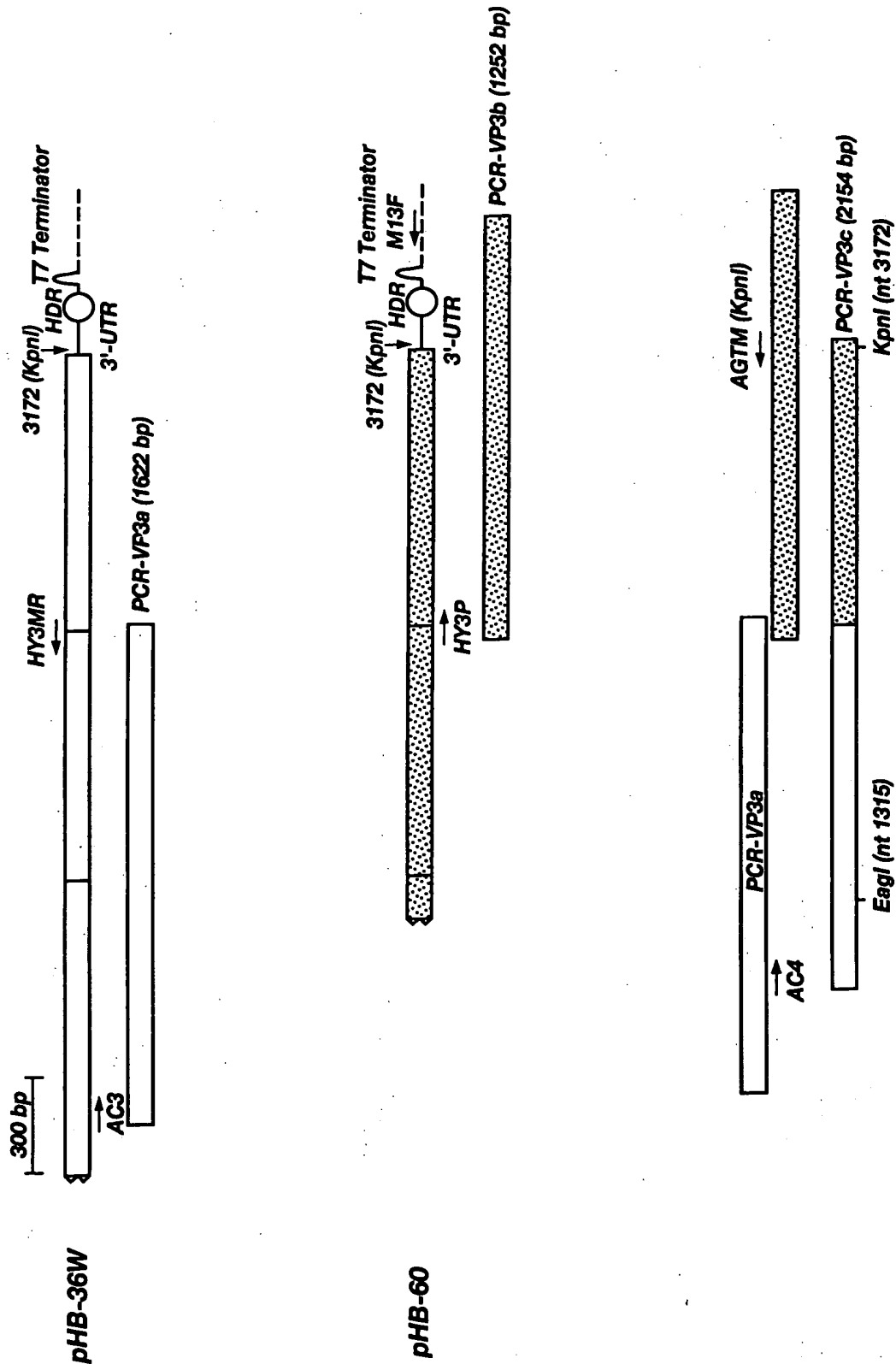


FIG. 8B

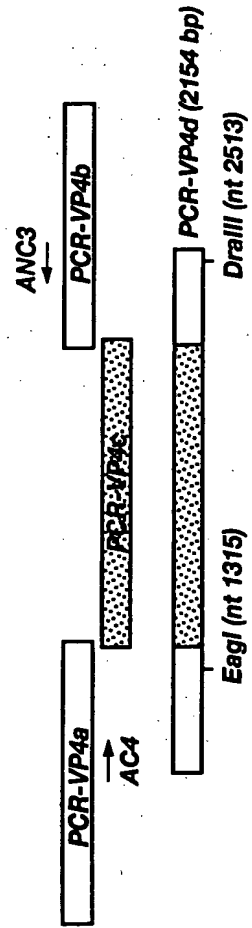
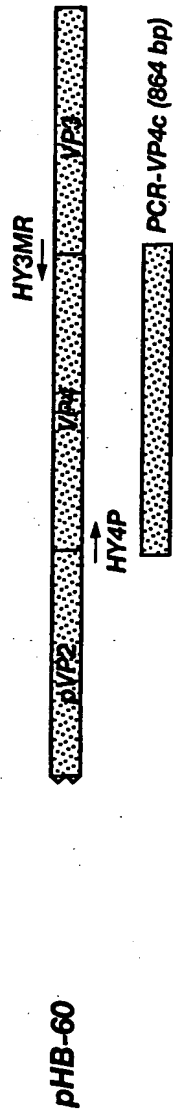
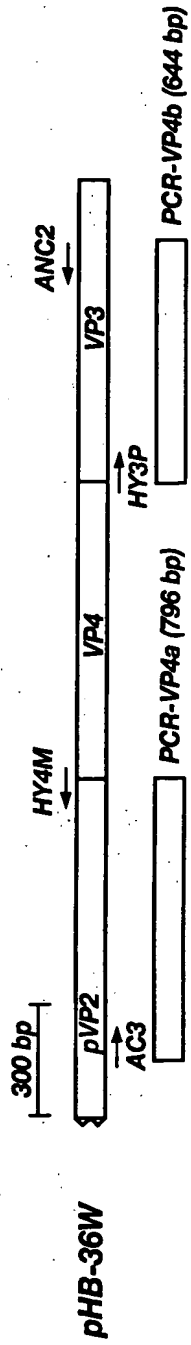


FIG. 8C

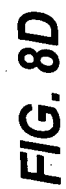




FIG. 8E

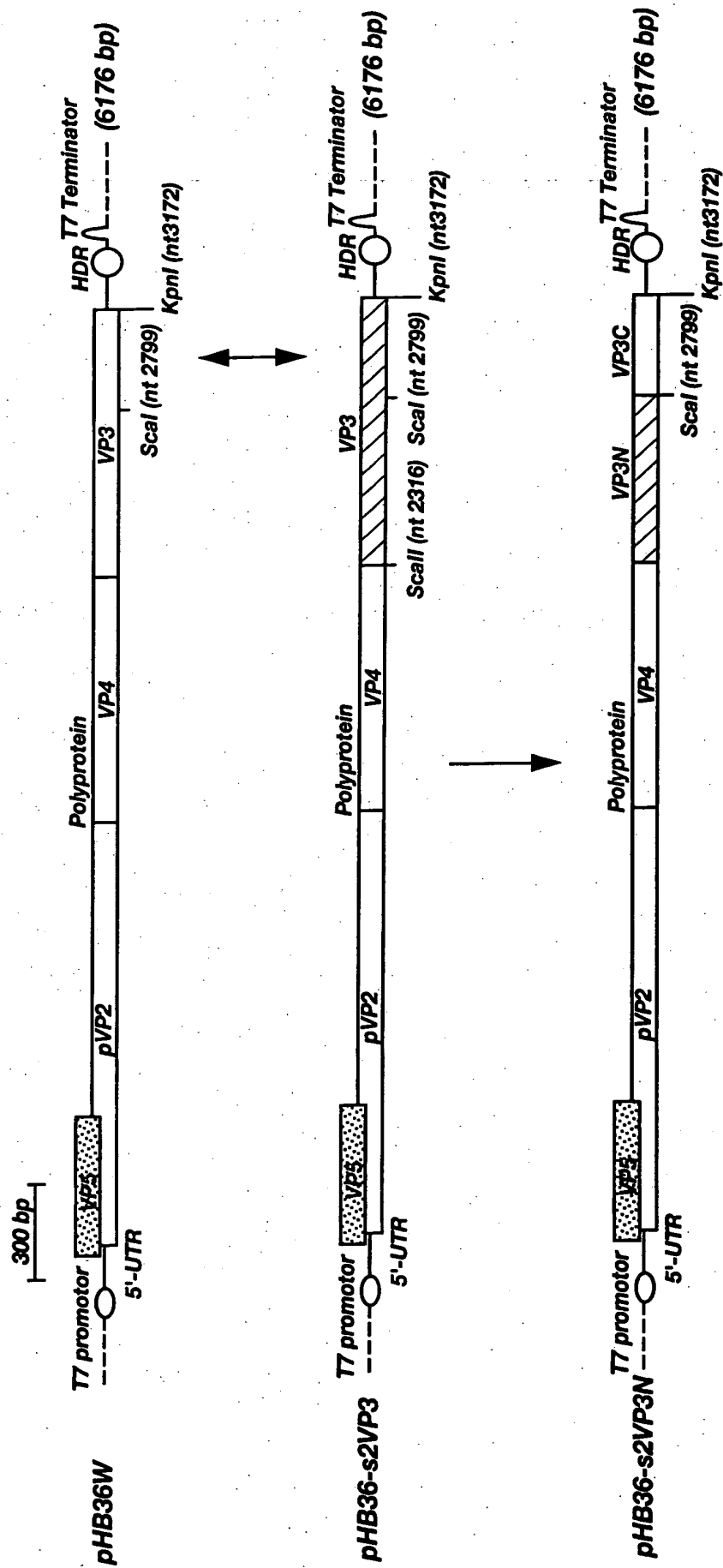


FIG. 8F

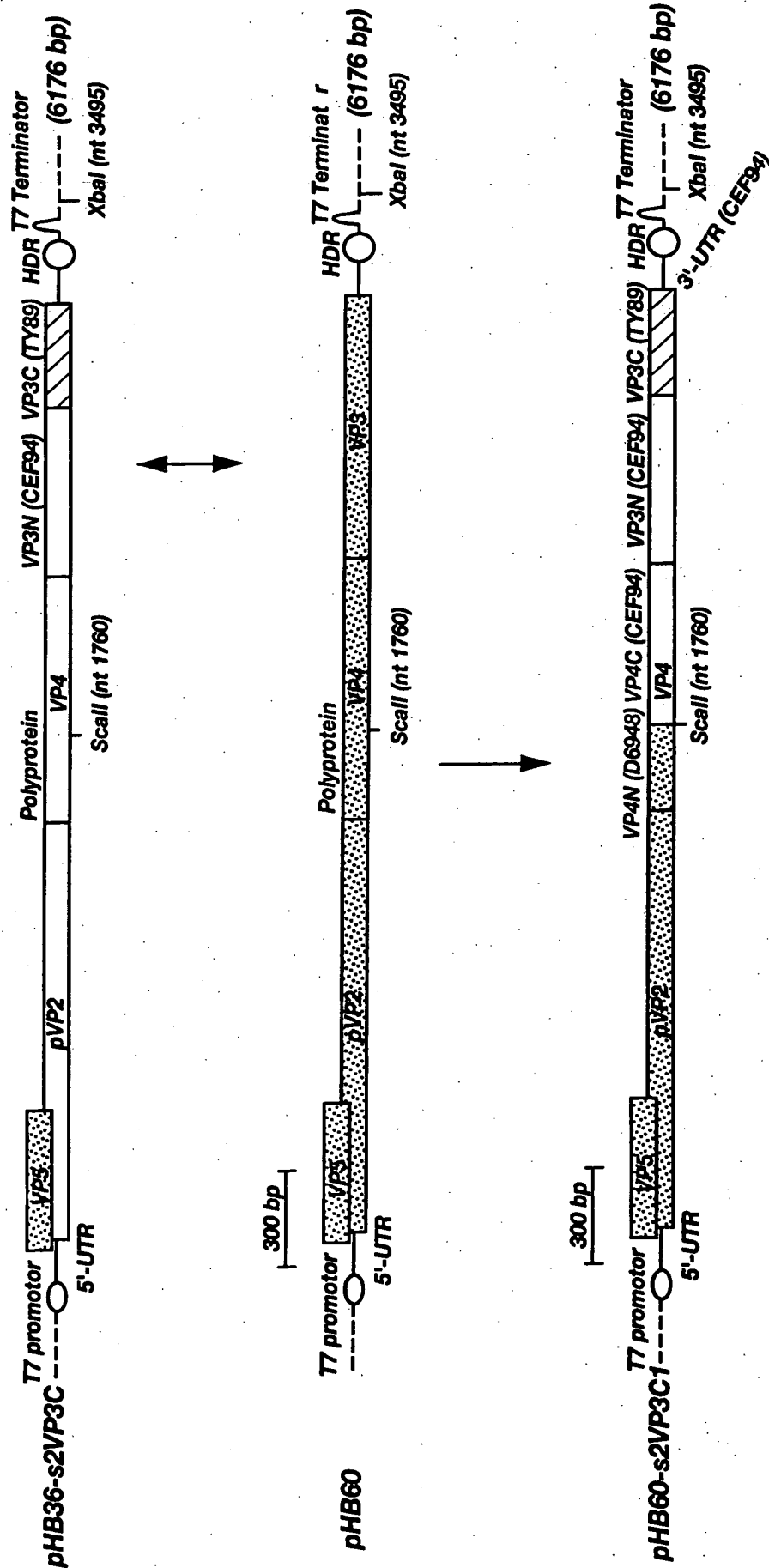


FIG. 8G

FIG. 9

		<div> <div>VP4 ←</div> <div>→ VP3</div> </div>	
CEF94-PP:	724-FPHNPRD WDRLPYLNLP YLPPNAGRQY HLAAMAASEFK ETPELESVR AMEAAANVDP	780	
TY89-PP:	724-.....T.....F.....L.....D.....D.....	780	
<div> <div>← SacII</div> </div>			
CEF94-PP:	LFQSALSVFM WLEENGIVTD MANFALSDPN AHRMRNFLAN APQAGSKSQR AKYGTAGYGV	840	
TY89-PP:	..R...Q... ..K.....	840	
<div> <div>← SacI</div> </div>			
CEF94-PP:	EARGPTPEEA QREKDTTRISK KMETMGIYFA TPEWVALNGH RGPSPGQLKY WONTREIPDP	900	
TY89-PP:	..... ..E. 900	900	
CEF94-PP:	NEDYLDYVHA EKSRLASEEQ ILRAATSIYG APQAEPPQA FIDEVAKVYE INHGRGPNQE	960	
TY89-PP:	....P..... V.....R....	960	
CEF94-PP:	QMKDLLLTAM EMKHRNPRRA LPKPKPKPNA PTQRPGRIG RWIRTVSDLE	1012	
TY89-PP:	.....P.....S.....	1012	

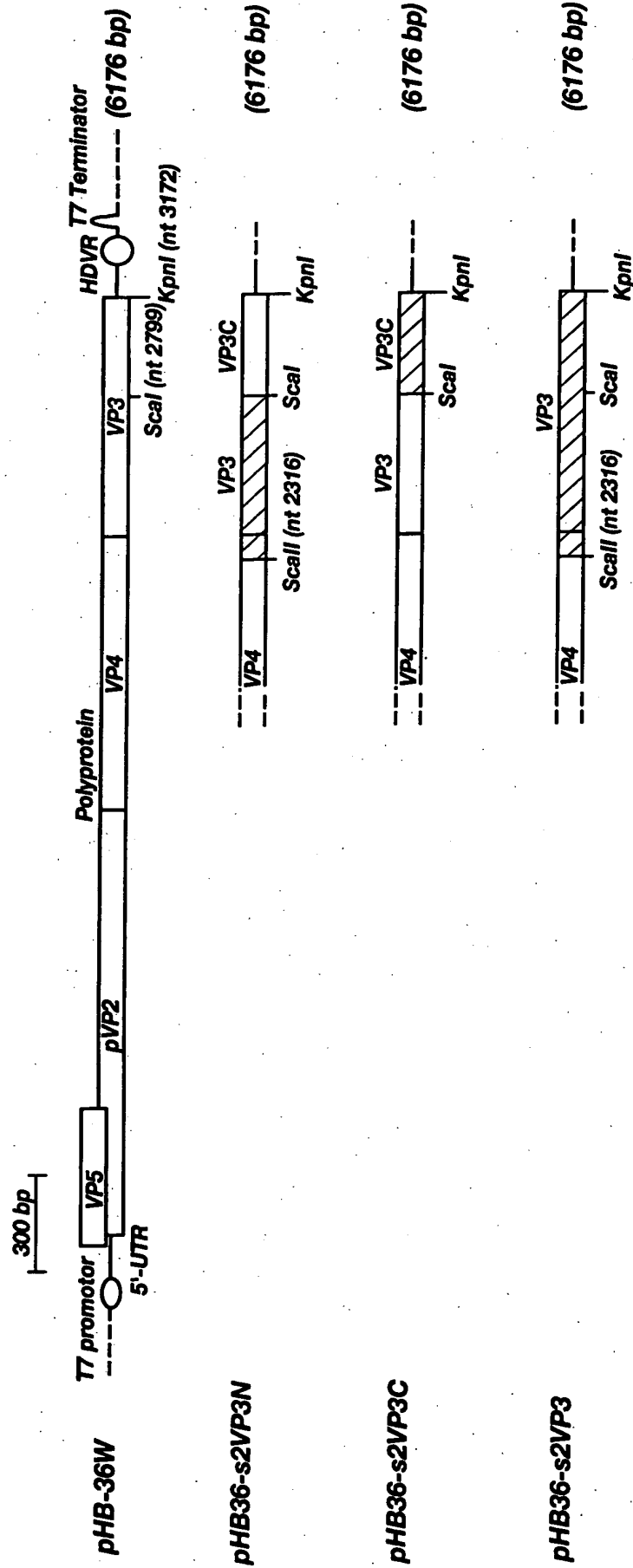
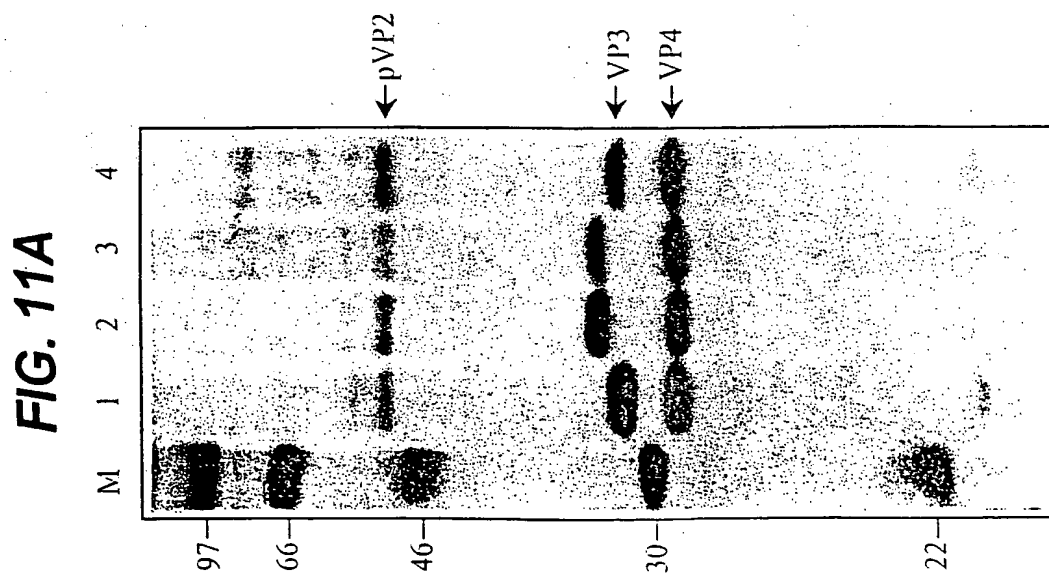
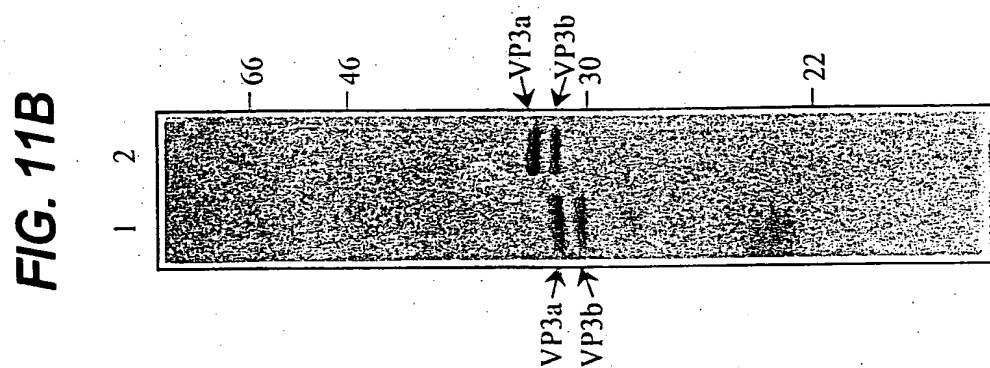
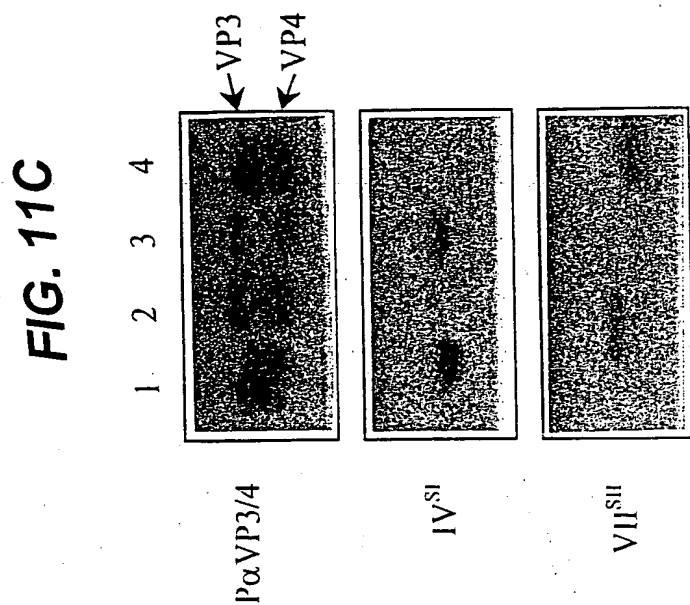


FIG. 10



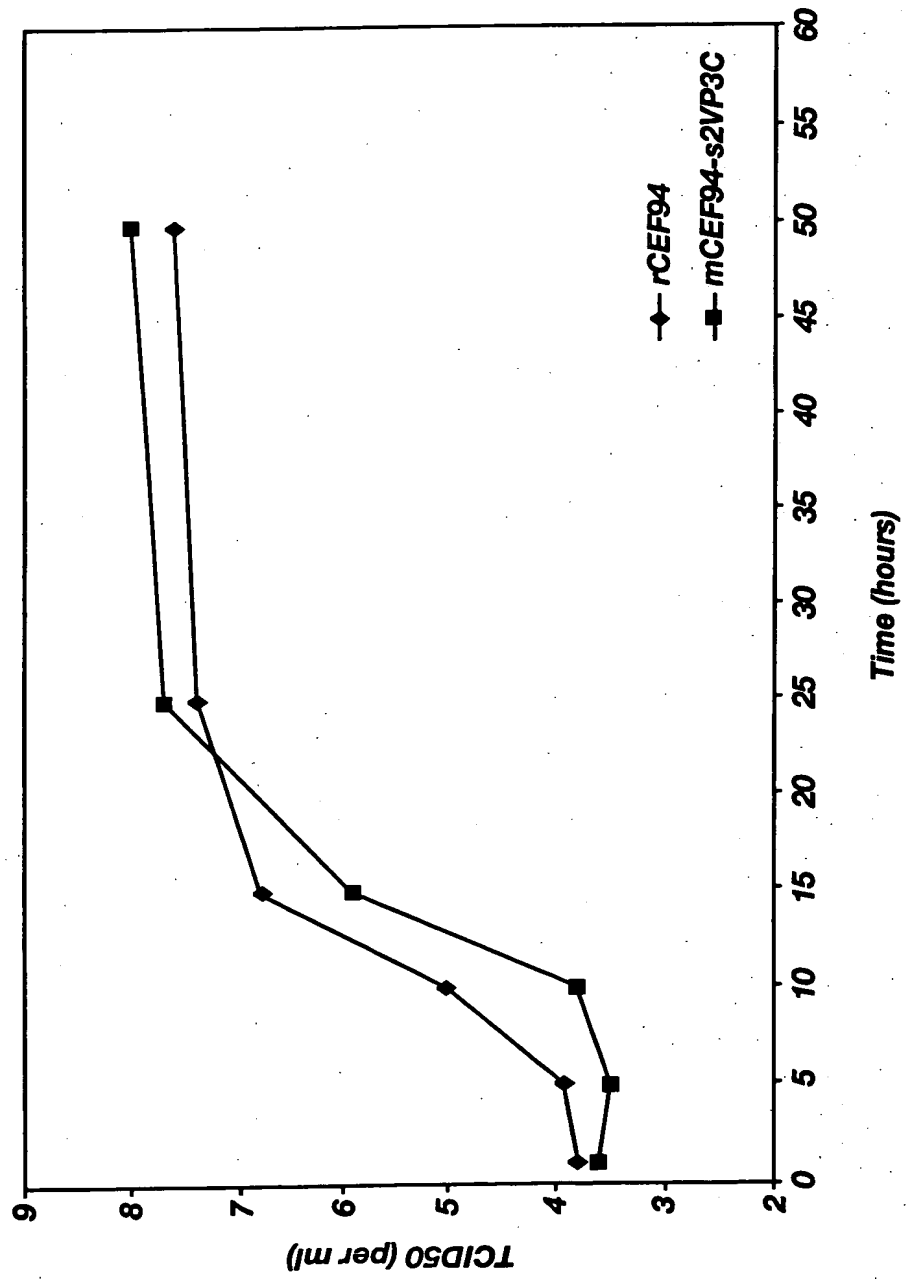
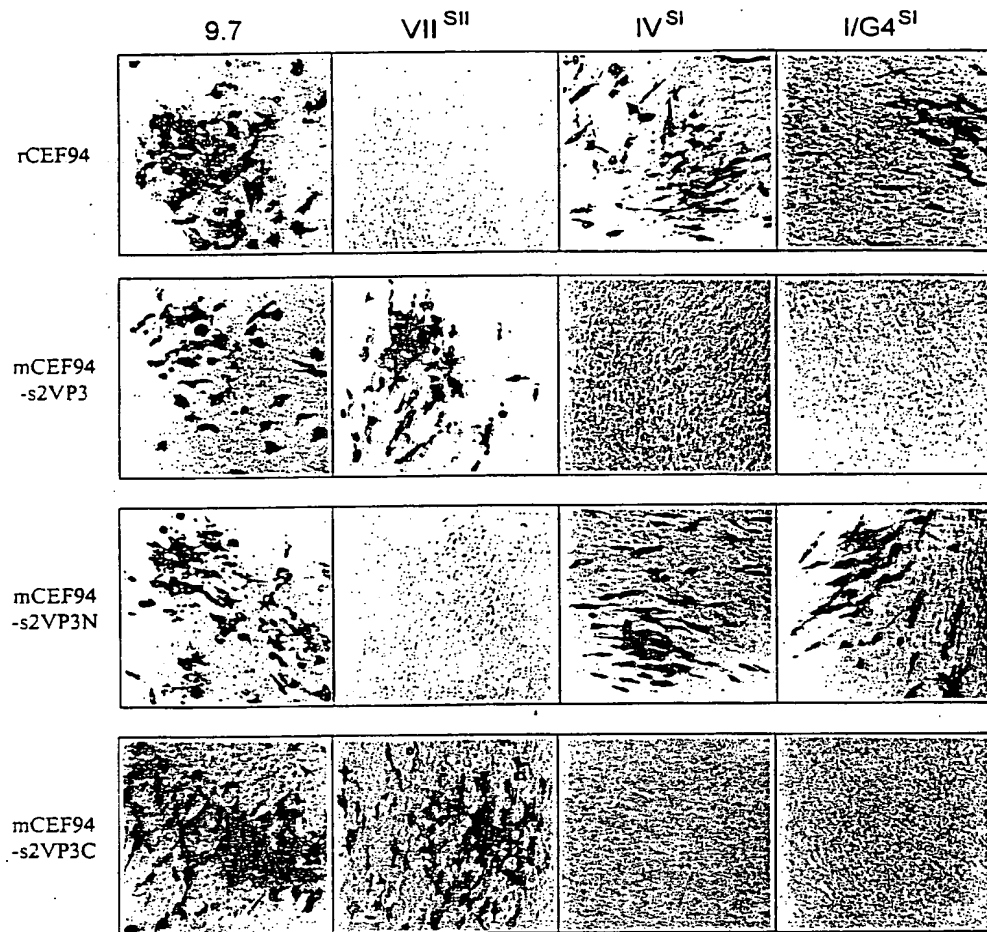


FIG. 12

FIG. 13



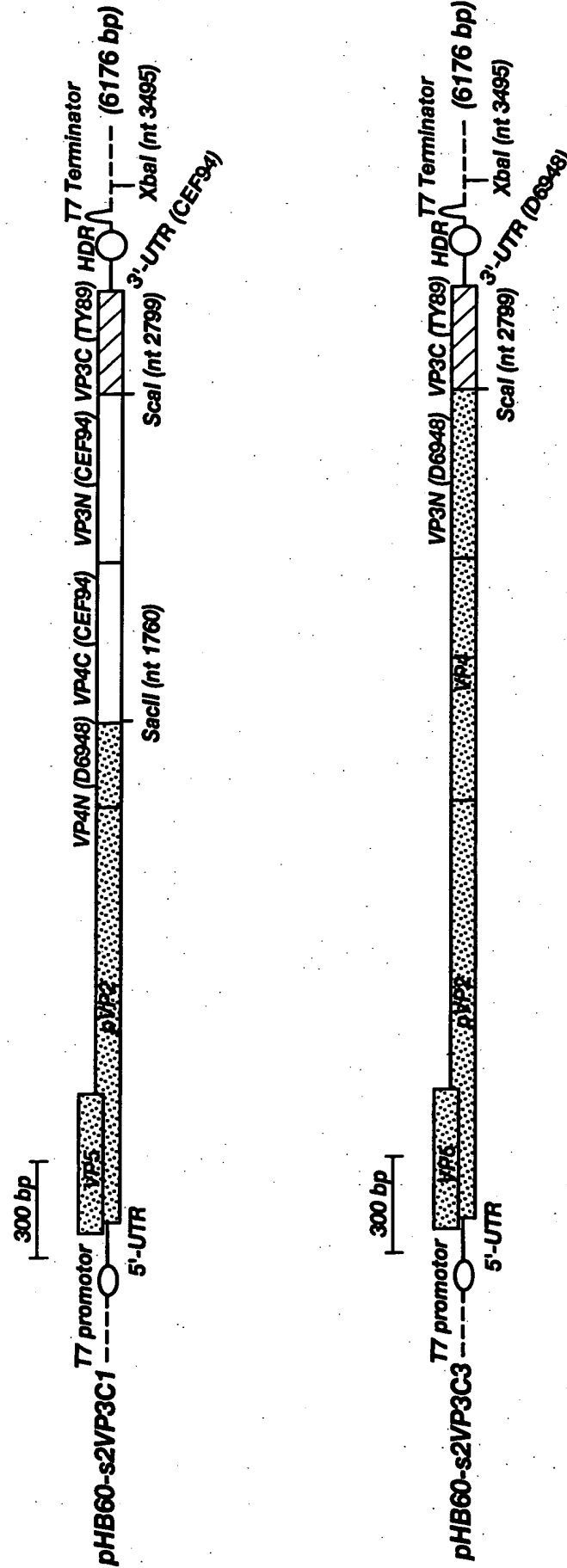


FIG. 14

FIG. 15

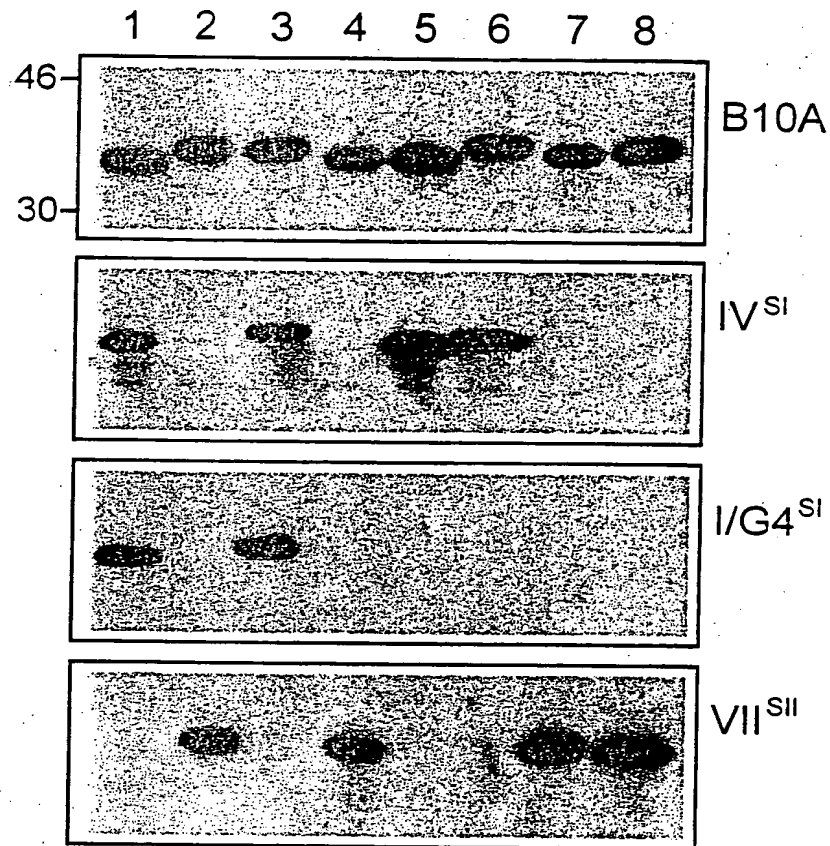
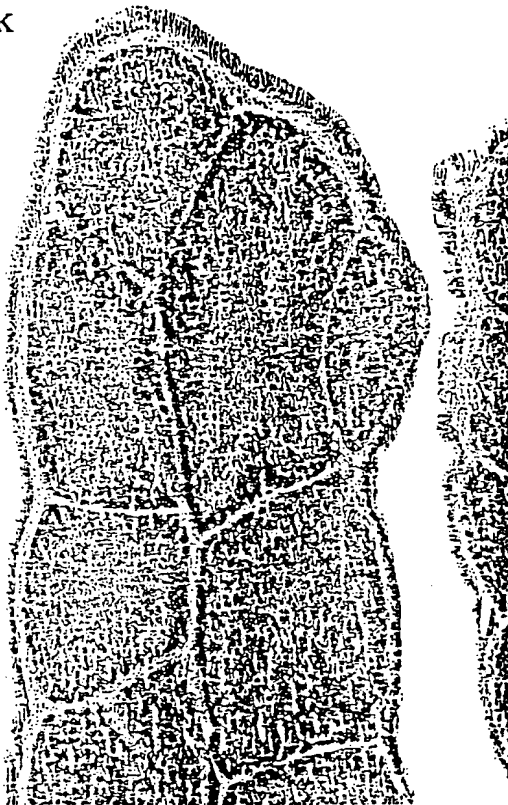


FIG. 17

Mock



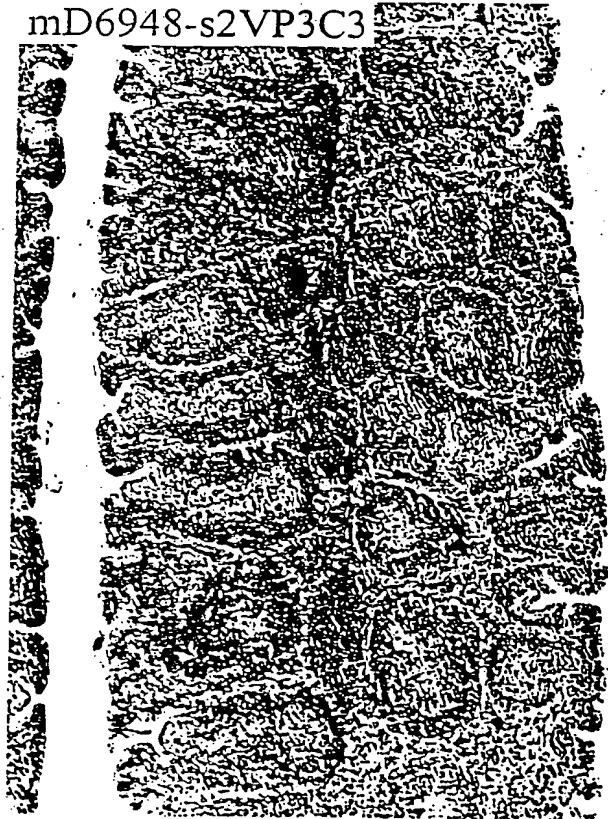
D6948



mD6948-s2VP3C1



mD6948-s2VP3C3



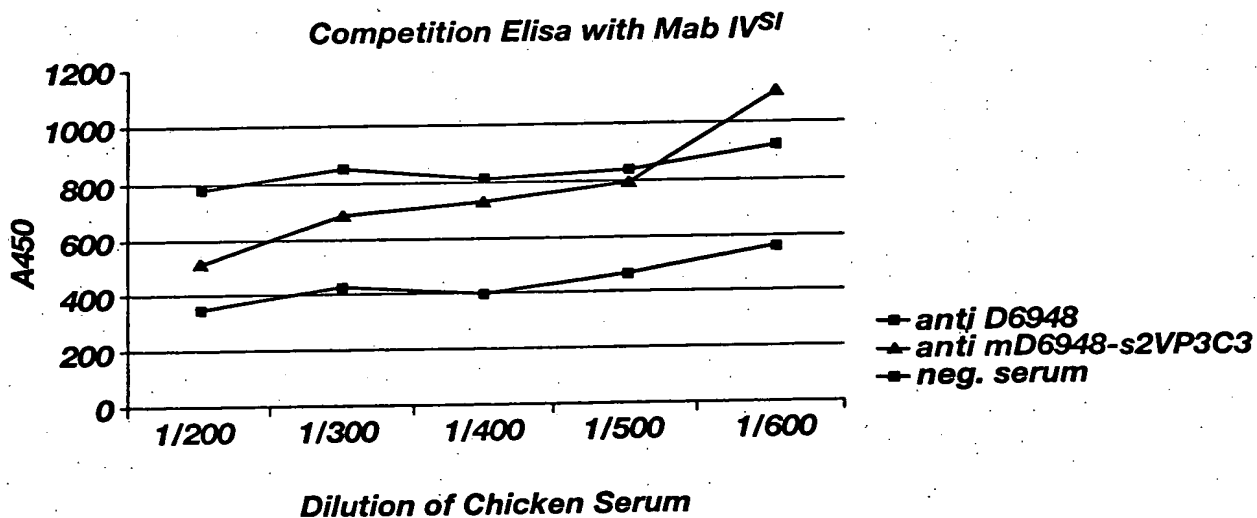
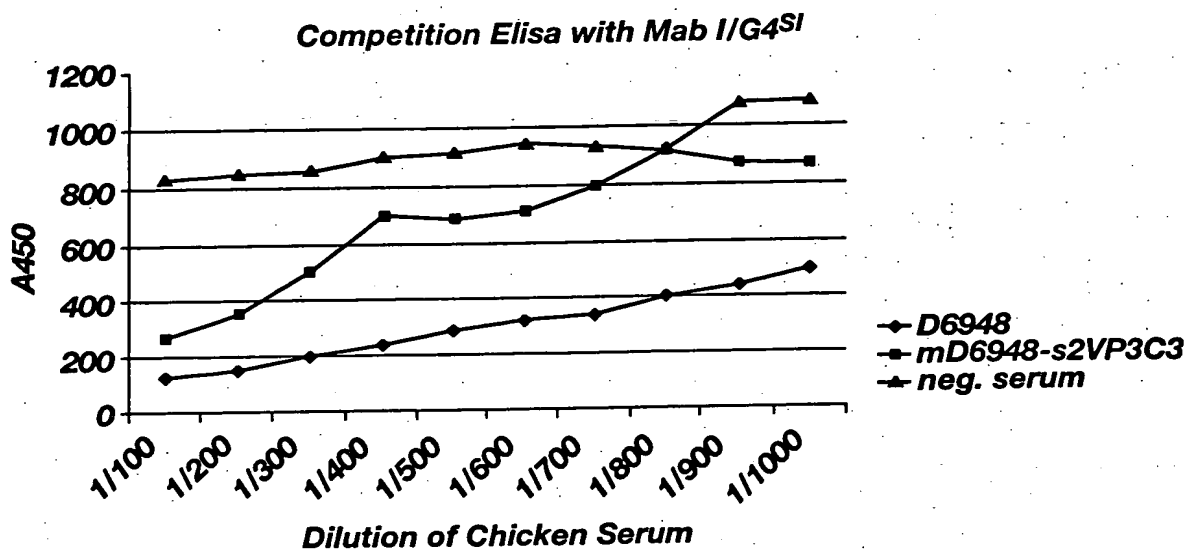


FIG. 18

FIG. 19

D6948-VP5: MLSLMVSRDQ TNDRSDEPA RSNPTDCSVH TEPDANNRT GVHSGRHPRE AHSQVRDLDL 60
CEF94-VP5: ----K..G. 56

D6948-VP5: QFDCGGHRVR ANCLFPWFPW LNCGCSLHTA EQWELQVRSD APDCPEPTGQ LQLQASESE 120
CEF94-VP5:I.. 116

D6948-VP5: SHSEVKHTPW WRLCTKWHHK RRDLPKPE 149
CEF94-VP5:S.R... 145

D6948-PP:	MTNLQDQTOQ	IVPFIRSLIM	PTTGPASIPD	DTLEKHTLRS	ETSTYNLTVG	DTGSLIVFF	60
CEF94-PP:							60
D6948-PP:	PGFPGSIVGA	HYTLQSNGY	KFDQMLLTAQ	NLPASNYCR	LVSRLTVRS	STLPGGVYAL	120
CEF94-PP:							120
D6948-PP:	NGTINAVTFQ	GSLSELTDS	YNGLMSATAN	INDKIGNLV	GEVTVLSLP	TSYDLGYVRL	180
CEF94-PP:							180
D6948-PP:	GDOIPIAIGLD	PKMVATCDSS	DRPRVYTITA	ADDYQFSSQY	QAGGVITLTF	SANIDAITSL	240
CEF94-PP:					P.		240
D6948-PP:	SIGGELVFQT	SVQGLILGAT	IYLIGEDGTA	VITRAVAADN	GLTAGTDNLM	PFNIVIPTSE	300
CEF94-PP:	V.	H.V.			N.	L	300
D6948-PP:	ITQPITSIKL	EIVTSKSGGQ	AGDQMSWSAS	GSLAVTIHGG	NYPGALRPVT	LVAYERVATG	360
CEF94-PP:				R			360
D6948-PP:	SVVTVAGVSN	FELIPNELA	KNLVTEYGRF	DPGAMNYTKL	ILSERDRLGI	KTVWPTREYT	420
CEF94-PP:							420
D6948-PP:	DFREYFMEVA	DLNSPLKIAG	AFGEKDIIRA	LRRIAIVPVVS	TLFPAPAPLA	HAIGEGVDYL	480
CEF94-PP:				I			480
D6948-PP:	LGDEAQAASG	TARAASGKAR	AASGRIROLT	LAADKGYEVV	ANLFQVPQNP	VVDGILASPG	540
CEF94-PP:							540
D6948-PP:	ILRGAHNLDC	VLREGATLFP	VVITTVEDAM	TPKALNSKMF	AVIEGVREDL	QPPSQRSFI	600
CEF94-PP:	V						600
D6948-PP:	RTLSGHRVYG	YAPDGVLPLE	TGRDYTEVVI	DDVWDDSIML	SKDPIPIVG	NSGNLAIAYM	660
CEF94-PP:							660
D6948-PP:	DVFRPKVPIH	VAMTGALNAY	GEIENVSFRS	TKLATAHRLG	LKLAGPGAFD	VNTGSNWATF	720
CEF94-PP:							720

FIG. 20B

D6948-PP:	IKRFPNPRD	WDRLPYLNP	YLPPNAGROY	DLAMAASEFK	ETPELESVR	AMEAAANVDP	780
CEF94-PP:	.....	.....	.....	H.....	.....	.....	780
D6948-PP:	LFQSALSVFM	WLEENGIVTD	MANFALSDPN	AHRMRNFLAN	APQAGSKSOR	AKYGTAGYGV	840
CEF94-PP:	.....	.....	.....	.....	.....	.....	840
D6948-PP:	EARGPTPEEA	QREKDRISK	KMETMGIYFA	TPWVALNGH	RGPSGOLKY	WONTREIPDP	900
CEF94-PP:	.....	.....	.....	.....	.....	.....	900
D6948-PP:	NEDYLDYVHA	EKSRLASEEQ	ILRAATSIYG	APGQAEPPQA	FIDEVAKVYE	INHGRGPNQE	960
CEF94-PP:	.....	.....	.....	.....	.....	.....	960
D6948-PP:	QMKDLLLTAM	EMKHRNPRRA	PPKPKPKPNA	PTQRPGRGLG	RWIRAVSDED	LE	1012
CEF94-PP:	.....	.....	L.....	.....	.....T.....	..	1012

FIG. 21A

D6948-VP1:	MSDVFNPOA	RSKISAAFGI	KPTAGQDVEE	LLIPKVVVPP	EDPLASPSRL	AKFLRENGYK	60
CEF94-VP1:	I.....	T.....	.....	.....	.....	.....	60
D6948-VP1:	ILQPRSLPEN	EEYETDQILP	DLAWMRQIEG	AVLKPTLSLP	IGDQEYFPKY	YPTHRPSKEK	120
CEF94-VP1:	V.....	.....	.....	.....	.....	.....	120
D6948-VP1:	PNAYPPDIAL	LQMIYLFLO	VPEATDNLKD	EVTLLTONIR	DKAYGSGTYM	GQATRLVAMK	180
CEF94-VP1:	.....	.....	....NEG....	.....	.....	.....	180
D6948-VP1:	EVATGRNPNK	DPLKLGTYFE	SIAQLLDITL	PVGPPGEDDK	PWVPLTRVPS	RMLVLTGDVD	240
CEF94-VP1:	.....	.....	.....	.....	.....	.....	240
D6948-VP1:	GEFEVEDYLP	KINKSSSGL	PYVGRTKGET	IGEMIAISNQ	FLRELSALK	QGAGTKGSNK	300
CEF94-VP1:	D.....	.....	.....	.....	.....T.....	.....	300
D6948-VP1:	KKLLSMLSDY	WYLSGGLLFP	KAERYDKSTW	LTKTRNIWSA	PSPTMLMISM	ITWPVMSNSP	360
CEF94-VP1:	.....	.....	.....	.....	.....	.....	360
D6948-VP1:	NNVLNIEGCP	SLYKENPFRG	GLNRIVEWIM	APDEPKALVY	ADNIYIVHSN	TWYSIDLEKG	420
CEF94-VP1:	.....	.....	.....L..E.....	.....	.....	.....	420
D6948-VP1:	EANCTRQHMQ	AAMYIILTRG	WSDNGDPMFN	QTWATEFAMNI	APALVVDSSC	LIMNLQIKTY	480
CEF94-VP1:	.....	.....	.....	.....	.....	.....	480
D6948-VP1:	GQSGNAATF	INNHLISTLV	LDQWNLMKQP	SPDSEEFKSI	EDKLGINFKI	ERSIDDIRGK	540
CEF94-VP1:	.....	.....	.....R..R.....	.....	.....	.....	540
D6948-VP1:	LRQLVPLAQP	GYLSGGVEPE	QPSPTVELDL	LGWSATYSKD	LGIYVPVLDK	ERLFCSAAYP	600
CEF94-VP1:	.....L....	.....S.....	.....	.....	.....	.....	600
D6948-VP1:	KGVENKSLKS	KVGIEQAYKV	VRYEALRLVG	GWNYPLLNKA	CKNNASAARR	HLEAKGFPLD	660
CEF94-VP1:	.....	.....	.....	.....G....	.....	.....	660
D6948-VP1:	EFLAEWSELS	EFGEAFEGFN	IKLTVTPESL	AELNRPVPPK	PPNVNRPVNT	GGLKAVSNAL	720
CEF94-VP1:	.....	.....S...	.....K.....	.....	.....	.....	720

FIG. 21B

D6948-VP1: KTGRYNEAG LSGLVLLATA RSRLQDAVKA KAEAEKHLKS KPDDPDADWF ERSETLSDLL 780
CEF94-VP1: 780

D6948-VP1: EKADIASKVA HSALVETSDA LEAVQSTSVY TPKYPEVKNP QTASNPVVGL HLPKRAITGV 840
CEF94-VP1: 840

D6948-VP1: QAALLGAGTS RPMGMEAPTR SKNAVKNMAKR RQRQKESRQ- - 879
CEF94-VP1:Q P 881

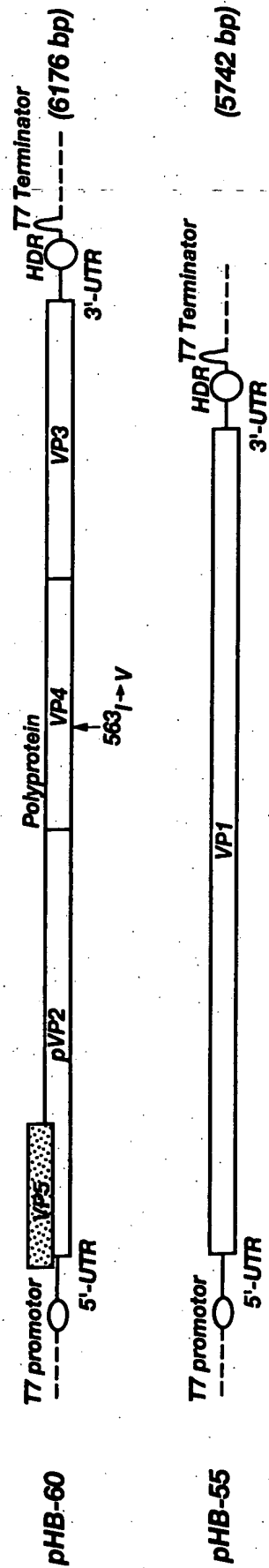


FIG. 22

FIG. 23C

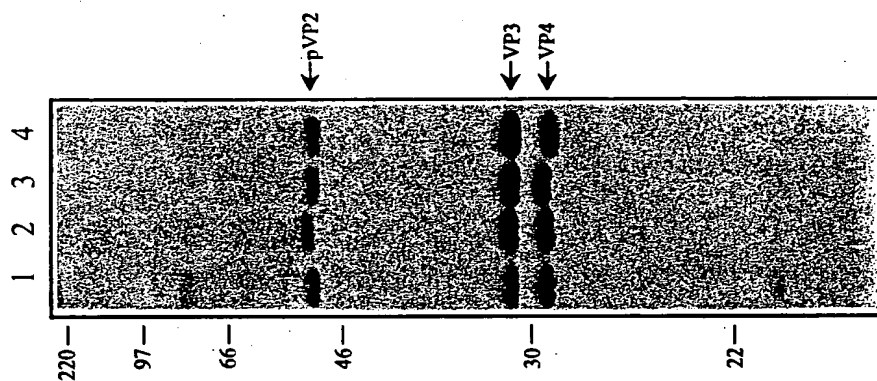


FIG. 23B

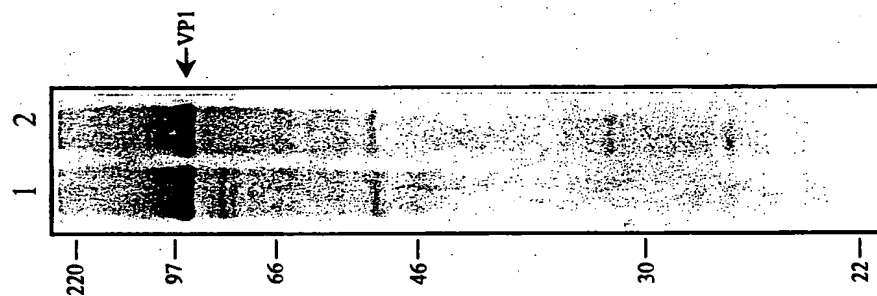


FIG. 23A

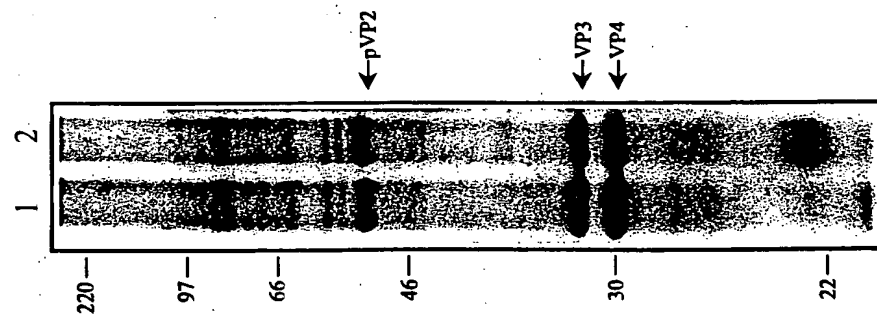
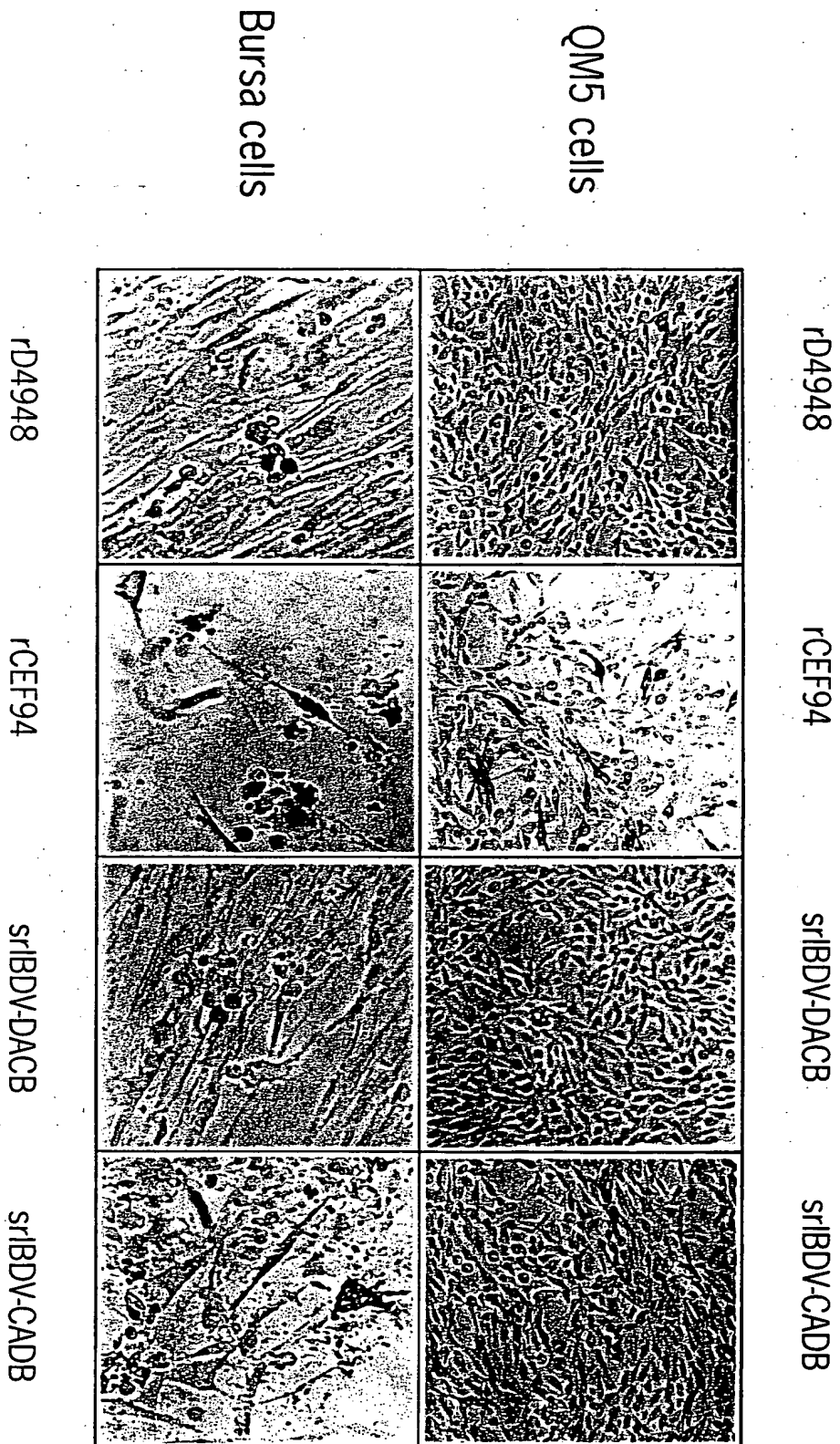


FIG. 24



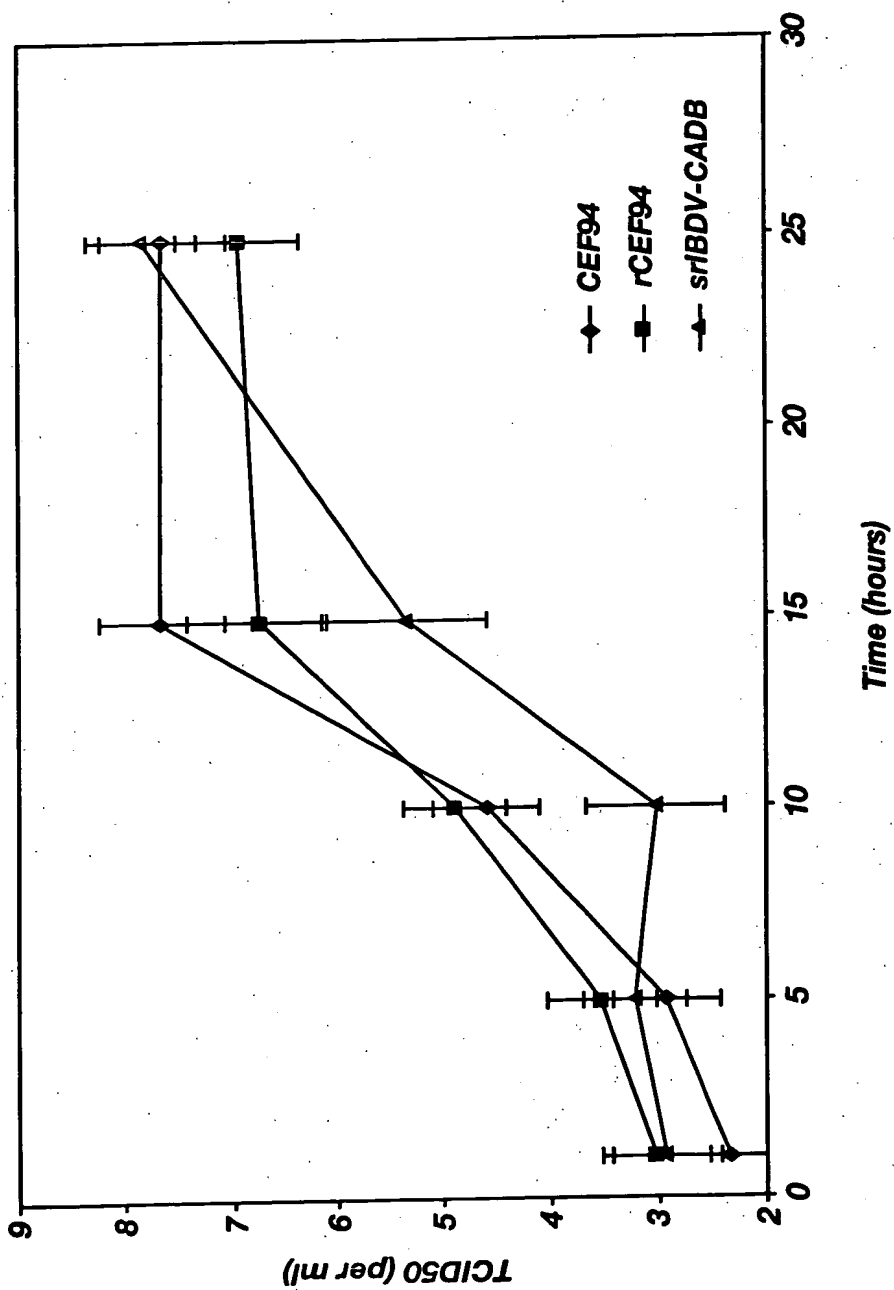


FIG. 25

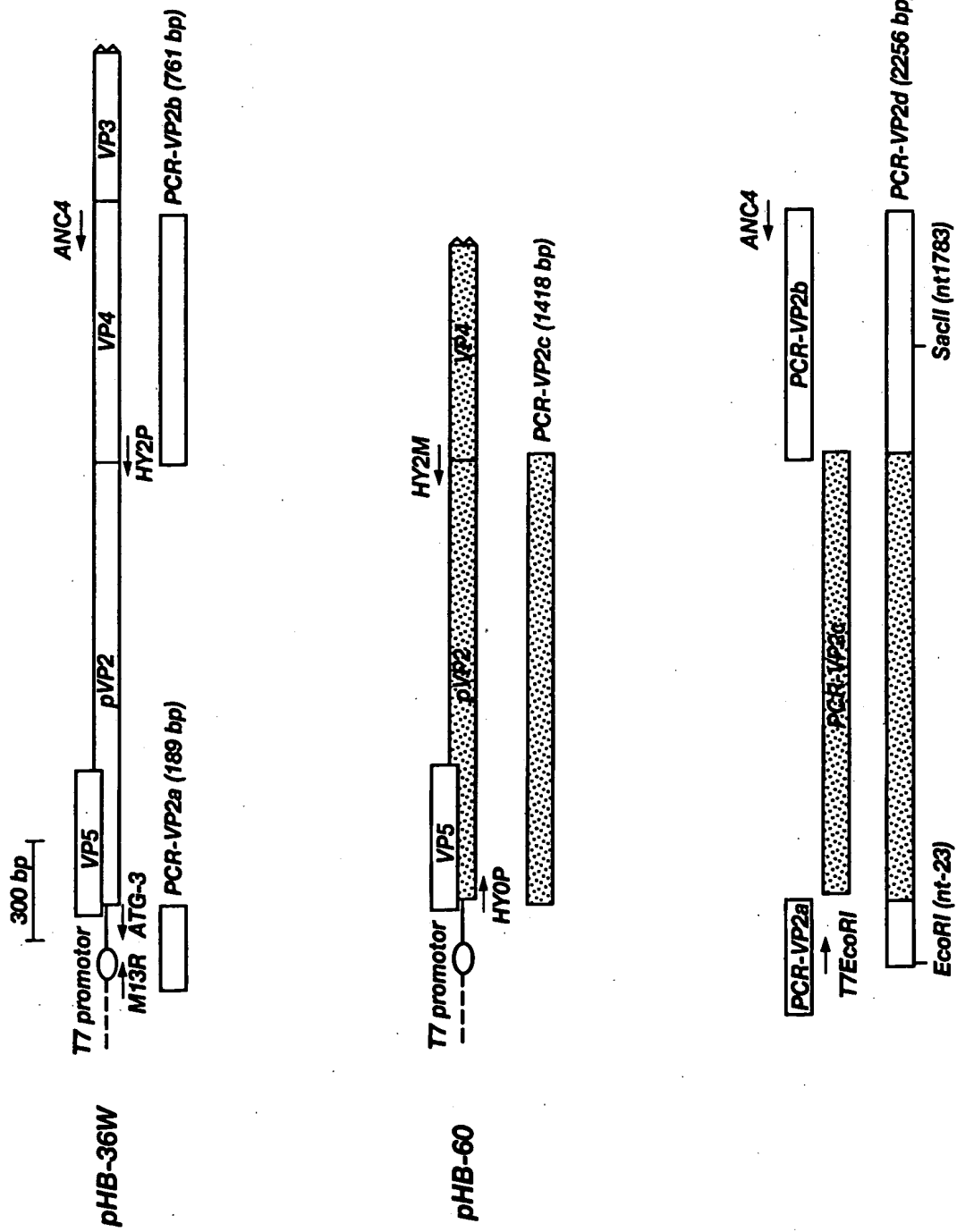


FIG. 26

FIG. 27

